















Wm. Giffin



*Natural and Political*  
**OBSERVATIONS**

Mentioned in a following INDEX,  
and made upon the  
**Bills of Mortality.**

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B Y

Capt. **JOHN GRAUNT**,  
Fellow of the *Royal Society*.

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With reference to the *Government, Religion, Trade, Growth, Air, Diseases*, and the  
several Changes of the said CITY.

— *Non, me ut, miretur Turba, labora,  
Contentus paucis Lectoribus.* —

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The Fifth Edition, much Enlarged.

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**L O N D O N,**

Printed by *John Martyn*, Printer to the  
*Royal Society*, at the Sign of the Bell in *St. Paul's*  
Church-yard. MDCLXXVI,





TO THE  
RIGHT HONOURABLE  
*JOHN* Lord *ROBERTS*,  
Baron of *Truro*, Lord *Privy Seal*,  
and one of His Majesties most Honourable  
*Privy Council*.

My Lord,



S the favours I have  
received from your  
Lordship oblige me  
to present you with  
some token of my *gratitude* :  
so the especial Honour I have

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for

## *The Epistle*

for your Lordship hath made me *solicitous* in the choice of the *Present*. For, if I could have given your Lordship any choice *Excerptions* out of the *Greek* or *Latin* Learning, I should ( according to our *English Proverb* ) thereby but carry Coals to *Newcastle* , and but give your Lordship *Puddle-water*, who, by your own eminent *Knowledge* in those learned *Languages* , can drink out of the very *Fountains* your self.

Moreover, to present your Lordship with tedious *Narrations*,



## *Dedictory.*

*rations* , were but to speak my own *Ignorance* of the *Value* , which His Majesty, and the Publick , have of your Lordship's Time. And in brief , to offer any thing like what is already in other Books, were but to derogate from your Lordships learning, which the world knows to be universal , and unacquainted with few useful things contained in any of them.

Now having ( I know not by what accident ) engaged my thoughts upon the *Bills of Mortality*, and so far succeeded

ed

## *The Epistle*

ed therein, as to have reduced several great confused *Volumes* into a few perspicuous *Tables* , and abridged such *Observations* as naturally flowed from them , into a few succinct *Paragraphs* , without any long *Series* of *multiloquious Deductions* , I have presumed to sacrifice these my small, but first publish'd, *Labours* unto your Lordship, as unto whose benign acceptance of some other of my *Papers* , even the birth of these is due ; hoping ( if I may without vanity say it ) they may be of as much use  
to

## *Dedictory.*

to persons in your Lordships place , as they are of little or none to me , which is no more than the fairest *Diamonds* are to the *Journey-men Jeweller* that works them, or the poor *Labourer* that first digg'd them from the Earth. For, with all humble submission to your Lordship, I conceive , That it doth not ill become a *Peer of the Parliament* , or *Member of his Majesties Council*, to consider how few starve of the many that beg : That the irreligious *Proposals* of some , to multiply people  
a by

## *The Epistle*

by *Polygamy* , is withal irrational , and fruitless : That the troublesome seclusions in the *Plague-time* are not a remedy to be purchased at vast inconveniencies : That the greatest *Plagues* of the City are equally, and quickly repaired from the Country : That the wasting of *Males* by Wars and Colonies do not prejudice the due proportion between them and *Females* : That the opinions of *Plagues* accompanying the Entrance of *Kings* , is false, and seditious : That *London*, the *Metropolis* of *England* ,  
is

## *Dedicatory.*

is perhaps a Head too big for the Body ; and possibly too strong : That this Head grows three times as fast as the Body unto which it belongs ; that is , It doubles its People in a third part of the time : That our *Parishes* are now grown madly disproportionable : That our *Temples* are not sutable to our *Religion* : That the *Trade*, and very *City of London*, removes *Westward* : That the walled City is but a fifth of the whole Pyle : That the old Streets are unfit for the present frequency of *Coaches* :

## *The Epistle*

That the passage of *Ludgate* is a throat too streight for the Body : That the fighting men about *London* are able to make three as great Armies as can be of use in this *Island* : That the number of Heads is such, as hath certainly much deceived some of our *Senators* in their appointments of *Poll-money*, &c. Now , although your Lordship's most excellent Discourses have well informed me, That your Lordship is no stranger to these *Positions* ; yet because I knew not, that your Lordship had ever deduced them



*Dedictory.*

them from the *Bills of Mortality* , I hoped it might not be ungrateful to your Lordship, to see unto how much profit that one Talent might be improved, besides the many curiosities concerning the waxing and waning of Diseases , the relation between *healthful* and *fruitful Seasons*, the difference between the City and the Country Air, &c. All which being new, to the best of my knowledge , and the whole Pamphlet not two hours reading, I did make bold to trouble your Lordship with a perusal

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*The Epistle, &c.*

usal of it, and by this humble Dedication of it, let your Lordship and the world see the Wisdom of our City, in appointing and keeping these Accompts, and with how much affection and success, I am,

*My Lord,*

Birchen-lane,  
25 January,  
166 $\frac{1}{2}$ .

*Your Lordships most obedient,*

*and most faithful Servant,*


JOHN GRAUNT.





To the Honourable

S<sup>r</sup> *Robert Moray*, Knight,  
One of His Majestie's Privy  
Council for His Kingdom of  
*Scotland*, and *President* of the  
Royal Society of *Philoso-*  
*phers* meeting at *Gresham-Col-*  
*ledg*, and to the rest of that  
honourable Society.

 *THE Observations which I*  
*happened to make (for I de-*  
*signed them not) upon the*  
*Bills of Mortality, have*  
*falln out to be both Political and Natu-*  
*ral, some concerning Trade and Go-*  
*vernment, others concerning the Air,*  
a 4 Coun-

## The Epistle

Countries , Seasons , Fruitfulness, Health, Diseases, Longevity, and the proportions between the Sex and Ages of Mankind. All which (because Sir Francis Bacon reckons his Discourses of Life and Death to be Natural History ; and because I understand your selves are also appointing means, how to measure the Degrees of Heat, Wetness, and Windiness in the several Parts of His Majestie's Dominions) I am humbly bold to think Natural History also, and consequently that I am obliged to cast in this small Mite into your great Treasury of that kind.

His Majesty being not only by ancient Right supremely concerned in matters of Government and Trade, but also by happy accident Prince of Philosophers, and of Physico-Mathematical Learning, not called so by Flatterers and Parasites,  
but

## Dedicatory.

*but really so, as well by his own personal Abilities, as Affection concerning those matters; upon which account I should have humbly dedicated both sorts of my Observations unto His most Sacred Majesty: but, to be short, I knew neither my Work nor my Person fit to bear His Name, nor to deserve His Patronage. Nevertheless, as I have presumed to present this Pamphlet, so far as it relates to Government and Trade, to one of His Majestie's Peers, and eminent Ministers of State: so I do desire your leave to present the same unto You also, as it relates to Natural History, and as it depends upon the Mathematicks of my Shop-Arithmetick. For You are not only His Majestie's Privy Council for Philosophy, but also His Great Council. You are the three Estates, viz. the Mathematical, Mechanical,*  
*and*

## The Epistle

*and Physicall. You are his Parliament of Nature ; and it is no less disparagement to the meanest of your number, to say there may be Commoners as well as Peers in Philosophy amongst you. For my own part, I count it happiness enough to myself, that there is such a Council of Nature, as your Society is, in Being ; and I do with as much earnestness enquire after your Expeditions against the Impediments of Science, as to know what Armies and Navies the several Princes of the World are setting forth. I concern myself as much to know who are Curatours of this or the other Experiment, as to know who are Mareschals of France, or Chancellor of Sweden. I am as well pleased to hear you are satisfied in a luciferous Experiment, as that a breach hath been made in the Enemy's Works ; and*  
your

## Dedicatory.

*your ingenious arguings immediately from sense, and fact, are as pleasant to me as the noise of victorious Guns and Trumpets.*

*Moreover, as I contend for the Decent Rights and Ceremonies of the Church, so I also contend against the envious Schismatics of your Society ( who think you do nothing unless you presently transmute Metals, make Butter and Cheese without Milk; and ( as their own Ballad hath it ) make Leather without Hides ) by asserting the usefulness of even all your preparatory and luciferous Experiments, being not the Ceremonies, but the substance and principles of useful Arts. For, I find in Trade the want of an universal measure, and have heard Musicians wrangle about the just and uniform keeping of time in their Consorts,*  
*and*

## The Epistle

*and therefore cannot with patience bear, that your Labours about Vibrations, eminently conducing to both, should be slighted, nor your Pendula called Swing-swangs with scorn. Nor can I better endure, that your Exercitations about Air should be termed fit imployment only for Airy Fancies, and not adequate Tasks for the most solid and piercing heads. This is my Opinion concerning you: and although I am none of your number, nor have the least ambition to be so, otherwise than to become able for your service, and worthy of your Trust; yet I am covetous to have the right of being represented by you: to which end I desire, that this little Exhibition of mine may be looked upon as a Free-holder's Vote for the choosing of Knights and Burgeses to sit in the Parliament of Nature, meaning thereby,*  
*that*



## Dedicatory.

*that as the Parliament owns a Freeholder, though he hath but forty shillings a year, to be one of them ; so in the same manner and degree, I also desire to be owned as one of you, and that no longer than I continue a faithful Friend and Servant of your Designs and Persons.*

J. G.

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A N

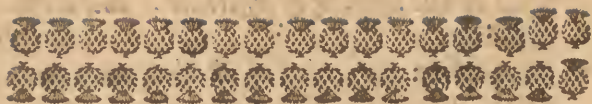
General

The first part of the book is devoted to a general  
description of the country and its people. The  
author describes the various tribes and their  
customs. He also mentions the different  
languages spoken in the country. The second  
part of the book is devoted to a description of the  
climate and the soil. The author describes the  
different seasons and the different crops grown in the  
country. The third part of the book is devoted to a  
description of the minerals and the animals of the  
country. The author describes the different kinds of  
minerals found in the country and the different  
kinds of animals that live in the country.

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THE



T H E  
P R E F A C E.

 *AVING been born , and  
bred in the City of Lon-  
don, and having always  
observed, that most of them, who  
constantly took in the weekly Bills  
of Mortality, made little other  
use of them, than to look at the  
foot, how the Burials increased or  
decreased; and, among the Casual-  
ties, what had happened rare, and  
extraordinary in the week cur-  
rent: so as they might take the same  
as a Text to talk upon in the next  
Company; and withal, in the  
Plague-*

## The Preface.

Plague-time, how the Sickness increased, or decreased, that so the Rich might judg of the necessity of their removal, and Trades-men might conjecture what doings they were like to have in their respective dealings :

2. Now, I thought that the Wisdom of our City had certainly designed the laudable practice of taking, and distributing these Accompts, for other, and greater uses, than those above-mentioned, or at least, that some other uses might be made of them : and thereupon I casting mine Eye upon so many of the General Bills, as next came to band, I found encouragement from  
them,



## The Preface.

*them, to look out all the Bills I could, and (to be short) to furnish my self with as much matter of that kind, even as the Hall of the Parish-Clarks could afford me; the which when I had reduced into Tables (the Copies whereof are here inserted) so as to have a view of the whole together, in order to the more ready comparing of one Year, Season, Parish, or other Division of the City, with another, in respect of all the Burials, and Christnings, and of all the Diseases, and Casualties, happening in each of them respectively; I did then begin not only to examine the Conceits, Opinions, and*

## The Preface.

*and Conjectures, which upon view of a few scattered Bills I had taken up ; but did also admit new ones, as I found reason, and occasion from my Tables.*

3. *Moreover, finding some Truths, and not commonly-believed Opinions, to arise from my Meditations upon these neglected Papers, I proceeded further, to consider what benefit the knowledge of the same would bring to the World ; that I might not engage my self in idle, and useless Speculations: but, (like those Noble Virtuosi of Gresham-Colledg, who reduce their subtile Disquisitions upon Nature into*  
*down-*



## The Preface.

*downright Mechanical uses, present the World with some real Fruit from those airy Blossoms.*

4. *How far I have succeeded in the Premisses, I now offer to the World's censure. Who, I hope, will not expect from me, not professing Letters, things demonstrated with the same certainty, wherewith Learned men determine in their Schools; but will take it well, that I should offer at a new thing, and could forbear presuming to meddle where any of the Learned Pens have ever touched before, and that I have taken the pains, and been at the charge of setting out those Tables,*

## The Preface.

bles, whereby all men may both correct my Positions, and raise others of their own. For herein I have, like a silly School-boy, coming to say my Lesson to the World (that Peevish, and Tetchy Master) brought a bundle of Rods, wherewith to be whip'd for every mistake I have committed.

CHAP.



*Natural and Political*  
OBSERVATIONS, &c.

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C H A P. I.

*Of the Bills of Mortality, their beginning,  
and progress.*

**T**H E first of the continued Weekly *Bills of Mortality* extant at the *Parish Clerks Hall*, begins the Twenty ninth of *December* 1603, being the first year of *King James* his Reign; since when a weekly *Accompt* hath been kept there of *Burials* and *Christnings*. It is true, There were *Bills*  
B before

before, *viz.* for the Years 1592, -93, -94 ; but so interrupted since, that I could not depend upon the sufficiency of them, rather relying upon those Accompts, which have been kept since in order, as to all the uses I shall make of them.

2. I believe, that the rise of keeping these Accompts was taken from the *Plague*: for the said *Bills* (for ought appears) first began in the said year 1592, being a time of great *Mortality*; and, after some disuse, were resumed again in the year 1603, after the great *Plague* then happening likewise.

3. These *Bills* were printed and published, not only every Week on *Thursdays*, but also a general Accompt of the whole Year was given in upon the *Thursday* before *Christmas-day*: which said general Accompts have been presented in the several manners following, *viz.* from the Year 1603, to the Year 1624, *inclusivè*, according to the Pattern here inserted.

1623.

1624.

*The general Bill for the whole Year, of all the Burials and Christnings, as well within the City of London, and the Liberties thereof, as in the Nine out Parishes adjoining to the City, with the Pest-house belonging*

*longing to the same: from Thursday the 18. of December 1623, to Thursday the 16. of December 1624, according to the Report made to the King's most Excellent Majesty by the Company of the Parish-Clerks of London.*

Buried this Year in the Fourscore }  
and seventeen Parishes of *Lon-* } 3386  
*don* within the Walls, }

Whereof of the Plague, } 1

Buried this Year in the Sixteen Pa- }  
rishes of *London*, and the *Pesthouse*, }  
being within the Liberties, and } 5924  
without the Walls, }

Whereof, of the Plague, } 5

The whole Sum of all the Burials in }  
*London*, and the Liberties thereof, is } 9310  
this Year }

Whereof, of the Plague, } 6

Buried of the Plague without the }  
Liberties, in *Middlesex* and *Surrey*, } 0  
this whole Year, }

Christened in *London*, and the Li- }  
berties thereof, this Year, } 6368

Buried this Year in the Nine out- }  
Parishes, adjoyning to *London*, and } 2900  
out of the Freedom, }

Whereof, of the Plague, } 5

(4)

The Total of all the Burials in the	}	12210
places aforesaid, is		
Whereof, of the Plague,	}	11
Christened in all the aforesaid		
places this Year,	}	8299
Parishes clear of the Plague,		
Parishes that have been Infected	}	116
this Year,		
	}	6

4. In the Year 1625, every Parish was particularized, as in this following *Bill*: where note, That this next year of Plague caused the Augmentation, and Correction of the *Bills*; as the former year of Plague did the very being of them.

1624.

1625.

*A general, or great Bill for this Year, of the whole number of Burials, which have been buried of all Diseases, and also of the Plague in every Parish within the City of London, and the Liberties thereof; as also in the Nine out Parishes adjoyning to the said City; with the Pest-house belonging to the same: from Thursday the 16. day of December, 1624. to Thursday the 15. day of December, 1625. according to the Report made*

*made to the King's most Excellent Majesty  
by the Company of Parish Clerks of Lon-  
don.*

LONDON,	Bur.	Plag.
<b>A</b> Lbanes in Woodstreet	188	78
Alhallows Barking	397	263
Alhallows Breadstreet	34	14
Alhallows the Great	442	302
Alhallows Hony-lane	18	8
Alhallows the Less	259	205
Alhallows in Lombard-street	86	44
Alhallows Stainings	183	138
Alhallows the Wall	301	155
Alphage Cripple-gate	240	190
Andrew-Hubbard	146	101
Andrews Undershaft	219	149
Andrews by Wardrobe	373	191
Anns at Aldersgate	196	128
Anns Black-Fryers	336	215
Antholins Parish	62	31
Austins Parish	72	40
Bartholomew at the Exchange	52	24
Bennets Fink	108	57
Bennets Grace Church	48	14
Bennets at Pauls Wharf	226	131
Bennets Shearhog	24	8
Botolphs Billings-gate	99	66
Christ's-Church Parish	611	371
	B 3	Chri-



## LONDON,

	<i>Bur.</i>	<i>Pl.</i>
Christophers Parish	48	28
Clements by Eastcheap	87	72
Dionys Back-Church	99	59
Dunstons in the East	335	225
Edmunds Lumbardstreet	78	49
Ethelborow in Bishops-gate	205	101
St. Faiths	89	45
St. Fosters in Foster-lane	149	102
Gabriel Fen-Church	71	54
George Botolphs-lane	30	19
Gregories by Pauls	296	196
Hellens in Bishops-gate street	136	71
James by Garlick-hith	180	109
John Eaptist	122	79
John Evangelist	7	0
John Zacharies	143	97
James Dukès-place	310	154
Katherine Colemanstreet	26	175
Katherine Cree Church	886	373
Lawrence in the Jewry	91	55
Lawrence Pountney	206	127
Leonards Eastcheap	55	26
Leonards Foster-lane	292	209
Magnus Parish by the Bridge	137	85
Margarets Lothbury	114	64
Margarets Moses	37	25
Margarets new Fishstreet	123	82
Margarets Pattons	77	50

Mary



<i>LONDON,</i>	<i>Eur.</i>	<i>Pl.</i>
Mary Ab-Church	98	58
Mary Aldermanbury	126	79
Mary Aldermary	92	54
Mary le Bow	35	19
Mary Bothaw	22	14
Mary Coal-Church	26	11
Mary at the Hill	152	84
Mary Mounthaw	76	58
Mary Sommerfet	270	192
Mary Stainings	70	44
Mary Woolchurch	58	35
Mary Woolnoth	82	50
Martins Ironmonger-lane	25	18
Martins at Ludgate	254	164
Martins Orgars	88	47
Martins Outwich	60	30
Martins in the Vintry	339	208
Matthew Friday-street	24	11
Maudlins in Milk-street	401	23
Maudlins Old-fish-street	225	142
Michael Bassishaw	199	139
Michael Cornhill	159	79
Michael Crooked lane	144	91
Michael Queen-hich	215	157
Michael in the Quern	53	30
Michael in the Royal	111	61
Michael in Wood-street	189	68
Mildreds Bread-street	60	44

<b>LONDON,</b>	<i>Bur.</i>	<i>Pl.</i>
Mildreds Poultry	94	45
Nicholas Acons	33	13
Nicholas Coal-Abby	87	67
Nicholas Olaves	70	43
Olaves in Hart-street	266	195
Olaves in the Jewry	43	25
Olaves in Silver-street	274	103
Pancras by Soper-lane	17	8
Peters in Cheap	68	44
Peters in Cornhill	318	78
Peters at Pauls Wharf	97	68
Peters Poor in Broad-street	52	27
Stevens in Coalman-street	506	350
Stevens in Walbrook	25	13
Swithins at London-stone	99	60
Thomas Apostles	141	107
Trinity Parish	148	87

*Buried within the 97 Parishes  
within the Walls of all Di-  
scases* } 14340

*Whereof, of the Plague* } 9197

Andrews

	<i>Bur.</i>	<i>Plag.</i>
Andrews in Holborn	2190	1636
Bartholomew the Great	516	360
Bartholomew the Less	111	65
Brides Parish	1481	1031
Botolph Algate	2573	1653
Bridewel Precinct	213	152
Botolphs Bishops-gate	2334	714
Botolphs Alders-gate	578	307
Dunstons the West	860	642
Georges Southwark	1608	912
Giles Cripplegate	3988	2338
Olaves in Southwark	3689	2609
Saviours in Southwark	2746	1671
Sepulchres Parish	3425	2420
Thomas in Southwark	335	277
Trinity in the Minories	131	87
At the Pesthouse	194	189

*Buried in the 16 Parishes with-  
 out the Walls, standing part  
 within the Liberties, and part  
 without, in Middlesex, and Sur-  
 rey, and at the Pest-house,*  
*Whereof, of the Plague*

26972

17153

*Buried*

*Buried in the Nine out Parishes.*

	<i>Bur.</i>	<i>Plag.</i>
Clements Temple-bar	1284	755
Giles in the Fields	1333	947
James at Clarken-well	1191	903
Katherins by the Tower	998	744
Leonards in Shoreditch	1995	1407
Martins in the Fields	1470	973
Mary White-chapel	3305	2272
Magdalens Bermondsey	1127	889
Savoy Parish	250	176

*Buried in the Nine out Parishes, in* } *Middlesex and Surrey,* } 12953

*Whereof, of the Plague,* } 9067

*The Total of all the Burials of all*  
*Diseases, within the Walls, with-*  
*out the Walls, in the Liberties,* } 54265  
*in Middlesex and Surrey: with*  
*the Nine out Parishes, and the*  
*Pest-house,*

*Whereof, Buried of the Plague, this*  
*present year, is* } 35417

*Christnings this present year, is* } 6983

*Parishes clear this year, is* } 1

*Parishes infected this year, is* } 121

.5. In

5. In the Year 1626, the City of *Westminster*, in imitation of *London*, was inserted. The gross Accompt of the *Burials* and *Christenings*, with distinction of the *Plague* being only taken notice of therein; the fifth, or last Canton, or Lined-space, of the said Bill, being varied into the form following, viz.

In <i>Westminster</i> this Year	{ <i>Buried</i>	471
	{ <i>Plague</i>	13
	{ <i>Christnings</i>	361

6. In the Year 1629, an Accompt of the *Diseases* and *Casualties*, whereof any dyed, together with the distinction of *Males* and *Females*, making the sixth Canton of the Bill, was added in manner following.

*The Canton of Casualties; and of the Bill for the Year 1632, being of the same form with that of 1629.*

*The*

*The Diseases and Casualties this  
Year, being 1632.*

<b>A</b> Bortive and Stilborn	415
<b>A</b> Affrighted	1
<b>A</b> ged	628
<b>A</b> gue	43
<b>A</b> poplex and Meagrim	17
<b>B</b> it with a mad Dog	1
<b>B</b> leeding	3
<b>B</b> loody flux, Scowring, and flux,	348
<b>B</b> ruised, Issues, Sores, and Ulcers,	28
<b>B</b> urnt and Scalded	5
<b>B</b> urst and Rupture	9
<b>C</b> ancer and Wolf	10
<b>C</b> anker	1
<b>C</b> hildbed	171
<b>C</b> hrisomes and Infants	2268
<b>C</b> old and Cough	55
<b>C</b> olick, Stone, and Strangury	56
<b>C</b> onsumption	1797
<b>C</b> onvulsion	241
<b>C</b> ut of the Stone	5
<b>D</b> ead in the street, and starved	6
<b>D</b> ropfie and Swelling	267
<b>D</b> rowned	4
<b>E</b> xecuted and Prest to death	38
<b>F</b> alling	

Falling Sicknefs	17
Fever	1108
Fiftula	13
Flox and Small Pox	531
French Pox	12
Gangrene	5
Gout	4
Grief	11
Jaundies	43
Jaw-faln	78
Impofthume	44
Kill'd by feveral accidents	6
King's Evil	38
Lethargy	2
Livergrown	87
Lunatick	5
Made away themfelves	15
Meafles	80
Murthered	7
Overlaid, and ftarved at Nurfe	7
Palfie	25
Piles	1
Plague	8
Planet	13
Pleurefie and Spleen	36
Purples and Spotted Fever	38
Quinfie	7
Rifing of the Lights	98
Sciatica	1
	Scurvy



Scurvy and Itch	9
Sudden!y	62
Surfet	86
Swine Pox	6
Teeth	470
Thrush and Sore-mouth	40
Tympany	13
Tifick	34
Vomiting	1
Worms	27

Christ- ned.	Males	4994	}	Buried	Males	4932
	Females	4590			Females	4603
	In all	9584			In all	9535

Whereof, of the Plague 8

Increased in the Burials in the 122 }  
 Parishes, and at the Pest-house } 993  
 this year, }

Decreased of the Plague in the 122 }  
 Parishes, and at the Pest-house } 662  
 this year, }

7. In the Year 1636, the Accompt of the *Burials* and *Christnings*, in the Parishes of *Islington*, *Lambeth*, *Stepney*, *Newington*, *Hackney*, and *Redriff* were added in the manner following, making a seventh Canton, viz.

(15)

<i>In Margarets Westminster</i>	{ Christned	440
	{ Buried	890
	{ Plague	0
<i>Islington</i>	{ Christned	36
	{ Buried	113
	{ Plague	0
<i>Lambeth</i>	{ Christned	132
	{ Buried	220
	{ Plague	0
<i>Stepney</i>	{ Christned	892
	{ Buried	1486
	{ Plague	0
<i>Newington</i>	{ Christned	99
	{ Buried	181
	{ Plague	0
<i>Hackney</i>	{ Christned	30
	{ Buried	91
	{ Plague	0
<i>Redriff</i>	{ Christned	16
	{ Buried	48
	{ Plague	0

*The Total of all the Burials in the seven last Parishes this Year* } 2958

*Whereof, of the Plague,* } 0

*The Total of all the Christnings,* } 1645

8. *Covent-Garden* being made a Parish, the Nine out Parishes were called the Ten out Parishes, the which in former years were but Eight.

9. In the Year 1660, the last-mentioned ten Parishes, with *Westminster*, *Islington*, *Lambeth*, *Stepney*, *Newington*, *Hackney*, and *Redriff*; are entred under two Divisions, viz. the one containing the Twelve Parishes lying in *Middlesex* and *Surrey*, and the other the Five Parishes within the City and Liberties of *Westminster*, viz. *St. Clement Danes*, *St. Paul's Covent-Garden*, *St. Martin's in the Fields*, *St. Mary-Savoy*, and *St. Margaret's Westminster*.

10. We have hitherto described the several steps whereby the *Bills of Mortality* are come up to their present state; we come next to shew how they are made and composed, which is in this manner, viz. When any one dies, then, either by tolling, or ringing of a Bell, or by bespeaking of a Grave of the *Sexton*, the same is known to the *Searchers*, corresponding with the said *Sexton*.

11. The *Searchers* hereupon (who are ancient Matrons, sworn to their Office) repair to the place where the dead Corps lies, and by view of the same, and by other enquiries, they examine by what *Disease* or *Casualty*

*casualty* the Corps died. Hereupon they make their Report to the *Parish Clerk*, and he, every *Tuesday* night, carries in an Accompt of all the *Burials* and *Christnings* happening that Week, to the *Clerk* of the *Hall*. On *Wednesday* the general Accompt is made up and printed, and on *Thursday* published and dispersed to the several Families who will pay four Shillings *per Annum* for them.

12. *Memorandum*, That although the general yearly *Bills* have been set out in the several varieties aforementioned, yet the Original Entries in the *Hall-books* were as exact in the very first year, as to all particulars, as now; and the specifying of *Casualties* and *Diseases* was probably more.

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## *General Observations upon the Casualties.*

**I**N my Discourses upon these *Bills*, I shall first speak of the *Casualties*, then give my Observations with reference to the *Places* and *Parishes* comprehended in the *Bills*; and next of the *Years* and *Seasons*.

1. There seems to be good reason, why the *Magistrate* should himself take notice of the  
C
numbers

numbers of *Burials* and *Christnings*, viz. to see whether the City increase or decrease in People; whether it increase proportionably with the rest of the Nation; whether it be grown big enough, or too big, &c. But why the same should be made known to the People, otherwise than to please them, as with a curiosity, I see not.

2. Nor could I ever yet learn (from the many I have asked, and those not of the least *Sagacity*) to what purpose the distinction between *Males* and *Females* is inserted, or at all taken notice of? or why that of *Marriages* was not equally given in? Nor is it obvious to every body, why the Accompt of *Casualties* (whereof we are now speaking) is made? The reason, which seems most obvious for this later, is, That the state of health in the City may at all times appear.

3. Now it may be Objected, That the same depends most upon the Accompts of *Epidemical Diseases*, and upon the chief of them all, the *Plague*; wherefore the mention of the rest seems only matter of curiosity.

4. But to this we Answer, That the knowledge even of the numbers which dye of the *Plague*, is not sufficiently deduced from the meer Report of the *Searchers*, which only the Bills afford; but from other Ratiocinations,  
and

and comparings of the *Plague* with some other *Casualties*.

5. For we shall make it probable, that in the Years of *Plague*, a quarter part more dies of that *Disease* than are set down ; the same we shall also prove by other *Casualties*. Wherefore, if it be necessary to impart to the world a good Accompt of some few *Casualties*, which since it cannot well be done without giving an Accompt of them all, then is our common practice of so doing very apt and rational.

6. Now, to make these Corrections upon the, perhaps, ignorant and careless *Searchers* Reports, I considered first of what Authority they were of themselves, that is, whether any credit at all were to be given to their Distinguishments: and finding that many of the *Casualties* were but matter of sense, as whether a Child were *Abortive* or *Stilborn*; whether men were *Aged*, that is to say, above sixty years old, or thereabouts when they died, without any curious determination; whether such *Aged* persons died purely of *Age*, as for that the *Innate heat* was quite extinct, or the *Radical moisture* quite dried up (for I have heard some Candid *Physicians* complain of the darkness which themselves were in hereupon) I say, that these Distin-



guishments being but matter of sense, I concluded the Searchers Report might be sufficient in the Case.

7. As for *Consumptions*, if the *Searchers* do but truly Report (as they may) whether the dead Corps were very lean and worn away, it matters not to many of our purposes, whether the Disease were exactly the same, as *Physicians* define it in their Books. Moreover, In case a man of seventy five years old died of a *Cough* (of which had he been free, he might have possibly lived to ninety) I esteem it little error (as to many of our purposes) if this Person be in the Table of *Casualties*, reckoned among the *Aged*, and not placed under the Title of *Coughs*.

8. In the matters of *Infants* I would desire but to know clearly, what the *Searchers* mean by *Infants*, as whether Children that cannot speak, as the word *Infant* seems to signify, or Children under two or three years old, although I should not be satisfied, whether the *Infant* died of *Wind*, or of *Teeth*, or of the *Convulsion*, &c. or were choaked with *Phlegm*, or else of *Teeth*, *Convulsion*, and *Scouring*, apart, or together, which, they say, do often cause one another; for, I say, it is somewhat to know how many die usually before they can speak, or how many live past any assigned number of years.



9. I say, it is enough, if we know from the *Searchers* but the most predominant Symptoms; as that one died of the *Head-ach*, who was sorely tormented with it, though the *Physicians* were of Opinion, that the Disease was in the *Stomach*. Again, if one died *suddenly*, the matter is not great, whether it be reported in the Bills, *Suddenly*, *Apoplexy*, or *Planet stricken*, &c.

10. To conclude, In many of these Cases the *Searchers* are able to report the Opinion of the *Physician*, who was with the Patient, as they receive the same from the Friends of the Defunct: and in very many Cases, such as *Drowning*, *Scalding*, *Bleeding*, *Vomiting*, *making away themselves*, *Lunaticks*, *Sores*, *Small pox*, &c. their own senses are sufficient, and the generality of the World are able pretty well to distinguish the *Gout*, *Stone*, *Dropsie*, *Falling sickness*, *Palsie*, *Agues*, *Pleuresie*, *Kick-ets*, one from another.

11. But now as for those Casualties, which are aptest to be confounded and mistaken, I shall in the ensuing Discourse presume to touch upon them so far, as the Learning of these Bills hath enabled me.

12. Having premised these general Advertisements, our first Observation upon the *Casualties* shall be, That in Twenty Years

there dying of all Diseases and Casualties 229250, that 71124 died of the *Thrush*, *Convulsion*, *Rickets*, *Teeth* and *Worms*; and as *Abortives*, *Chrysores*, *Infants*, *Livergrown*, and *Overlaid*; that is to say, that about  $\frac{1}{3}$  of the whole died of those Diseases, which we guess did all light upon Children under four or five years old.

13. There died also of the *Small Pox*, *Swine Pox*, and *Measles*, and of *Worms* without *Convulsions*, 12210. of which number we suppose likewise, that about  $\frac{1}{2}$  might be Children under six years old. Now, if we consider that sixteen of the said 229250 died of that extraordinary and grand Casualty, the *Plague*, we shall find that about thirty six *per Centum* of all quick conceptions died before six years old.

14. The second Observation is, That of the said 229250 dying of all Diseases, there died of *acute* Diseases (the *Plague* excepted) but about 50000, or  $\frac{2}{9}$  parts. The which proportion doth give a measure of the State, and disposition of this *Climate* and *Air* as to health; these *acute* and *Epidemical* Diseases happening suddenly and vehemently, upon the like corruptions and alterations in the *Air*.

15. The

15. The third Observation is, That of the said 229250, about seventy died of (*chronical* Diseases, which shews (as I conceive) the State and Disposition of the Country (including as well its *Food* as *Air*) in reference to health, or rather to *longevity*: for as the proportion of *acute* and *Epidemical* Diseases shews the aptness of the *Air* to sudden and vehement Impressions; so the *Chronical* Diseases shew the ordinary temper of the place: so that upon the proportion of *Chronical* Diseases seems to hang the judgment of the fitness of the Country for *long life*. For, I conceive, that in Countries subject to great *Epidemical* sweeps, men may live very long, but, where the proportion of the *Chronical* distempers is great, it is not likely to be so; because men being long sick, and alwaies sickly, cannot live to any great Age, as we see in several sorts of *Metal-men*, who, although they are less subject to *acute* Diseases than others, yet seldom live to be old, that is, not to reach unto those years, which *David* says is the Age of Man.

16. The fourth Observation is, That of the said 229250, not 4000 died of outward Grievs, as of *Cancers*, *Fistula's*, *Sores*, *Ulcers*, *broken and bruised Limbs*, *Imposthumes*, *Itch*, *King's Evil*, *Leprosie*, *Scald-head*,

*Swine Pox, Wens, &c. viz.* not one in fixty.

17. In the next place, whereas many persons live in great fear and apprehension of some of the more formidable and notorious Diseases following; I shall only set down how many died of each: that the respective numbers, being compared with the Total 229250, those persons may the better understand the hazard they are in.

*Table of notorious Diseases.*

Apoplex	1306
Cut of the Stone	38
Falling Sickness	74
Dead in the Streets	243
Gout	134
Head-ach	51
Jaundice	998
Lethargy	67
Leprosie	6
Lunatick	158
Overlaid and Starved	529
Palsie	423
Rupture	201
Stone and Strangury	863
Sciatica	5
Suddenly	4 4

*Table*

*Table of Casualties.*

Bleeding	69
Burnt and Scalded	125
Drowned	829
Excessive drinking	2
Frighted	22
Grief	279
Hanged themselves	222
Kill'd by several accidents	1021
Murdered	86
Poysoned	14
Smothered	26
Shot	7
Starved	51
Vomiting	136

18. In the foregoing Observations we ventured to make a Standard of the healthfulness of the *Air* from the proportion of *acute* and *Epidemical* Diseases, and of the wholsomeness of the Food, from that of the *Chronical*. Yet, for as much as neither of them alone do shew the *longevity* of the Inhabitants, we shall in the next place come to the more absolute Standard and Correction of both, which is the proportion of the Aged, *viz.* 15757 to the Total 229250. That  
is,

is, of about 1 to 15, or 7 *per Cent.* Only the question is, What number of years the *Searchers* call *Aged*, which I conceive must be the same that *David* calls so, *viz.* 70. For no man can be said to die properly of *Age*, who is much less. It follows from hence, That if in any other Country more than seven of the 100 live beyond 70, such Country is to be esteemed more healthful than this of our City.

19. Before we speak of particular *Casualties*, we shall observe, That among the several *Casualties* some bear a constant proportion unto the whole number of *Burials*; such are *Chronical* Diseases, and the Diseases whereunto the City is most subject; as for Example, *Consumptions, Dropsies, Jaundice, Gout, Stone, Palsie, Scurvy, Rising of the Lights or Mother, Rickets, Aged, Agues, Fevers, Bloody Flux* and *Scouring*: nay, some Accidents, as *Grief, Drowning, Men's making away themselves*, and being *Kill'd by several Accidents, &c.* do the like; whereas *Epidemical* and *Malignant* Diseases, as the *Plague, Purples, Spotted Fever, Small Pox* and *Measles* do not keep that equality: so as in some Years, or Months, there died ten times as many as in others.



## CHAP. III.

*Of Particular Casualties.*

1. **M**Y first Observation is, That few are *starved*. This appears, for that of the 229250, which have died, we find not above fifty one to have been *starved*, excepting helpless *Infants* at Nurse, which being caused rather by carelessness, ignorance, and infirmity of the Milch-women, is not properly an effect or sign of want of food in the Country, or of means to get it.

2. The Observation which I shall add hereunto, is, That the vast number of *Beggars*, swarming up and down this City, do all live, and seem to be most of them healthy and strong; whereupon I make this question, Whether, since they do all live by begging, that is, without any kind of labour; it were not better for the State to keep them, even although they earned nothing? that so they might live regularly, and not in that Debauchery, as many Beggars do; and that they might be cured of their bodily Impotencies,  
or



or taught to work, &c. each according to his condition and capacity ; or by being employed in some work (not better undone) might be accustomed and fitted for labour ?

3. To this some may Object, That *Beggars* are now maintained by voluntary Contributions, whereas in the other way the same must be done by general Tax ; and consequently, the Objects of Charity would be removed and taken away.

4. To which we Answer, That in *Holland*, although no where fewer Beggars appear to charm up commiseration in the credulous, yet no where is there greater or more frequent Charity : only indeed the Magistrate is both the *Beggar*, and the *Disposer* of what is got by *begging* ; so as all Givers have a Moral certainty that their Charity shall be well applied:

5. Moreover, I question, Whether what we give to a Wretch that shews us lamentable sores and mutilations, be alwaies out of the purest Charity ? that is, purely for God's sake ; for as much as when we see such Objects, we then feel in our selves a kind of pain and passion by consent, of which we ease our selves, when we think we ease them ; with whom we sympathized ; or else we bespeak aforehand the like commiseration in others

others towards our selves, when we shall (as we fear we may) fall into the like distress.

6. We have said, *'Twere better the Publick should keep the Beggars, though they earned nothing, &c.* But most men will laugh to hear us suppose, That any able to work (as indeed most *Beggars* are, in one kind of measure or another) should be kept without earning any thing. But we Answer, That if there be but a certain proportion of work to be done, and that the same be already done by the *non-Beggars*, then to imploy the *Beggars* about it, will but transfer the want from one hand to another; nor can a Learner work so cheap as a skilful practised Artist can. As for example, a practised *Spinner* shall spin a pound of Wool, worth two shillings, for six pence; but a Learner, undertaking it for three pence, shall make the wool indeed into yarn, but not worth twelve pence.

7. This little hint is the model of the greatest work in the World, which is the making of *England* as considerable for Trade as *Holland*; for there is but a certain proportion of Trade in the World, and *Holland* is prepossessed of the greatest part of it, and is thought to have more skill and experience to manage it; wherefore, to bring *England* into *Holland's* condition, as to this particular,

is the same, as to send all the *Beggars* about *London* into the *West Country* to Spin, where they shall only spoil the Clothiers Wool, and beggar the present Spinners at best ; but, at worst, put the whole Trade of the Country to a stand, until the *Hollander*, being more ready for it, have snapt that with the rest.

8. My next Observation is, That but few are *Murthred*. viz. not above 86 of the 229250, which have died of other Diseases and Casualties ; whereas in *Paris* few nights scape without their *Tragedy*.

9. The Reasons of this we conceive to be *Two* : One is the *Government* and *Guard* of the City by *Citizens* themselves, and that alternately. No man settling into a Trade for that employment. And the other is, The natural and customary abhorrence of that inhuman *Crime*, and all *Bloodshed*, by most *English men* : for of all that are *Executed*, few are for *Murther*. Besides the great and frequent *Revolutions* and *Changes* in *Government* since the Year 1650, have been with little *bloodshed* ; the *Usurpers* themselves having *Executed* few in comparison, upon the Accompt of disturbing their *Innovations*.

10. In brief, when any dead Body is found in *England*, no *Algebraist*, or *Uncypherer* of Letters

Letters, can use more subtle suppositions and variety of conjectures to find out the Demonstration or Cipher, than every common unconcerned person doth to find out the Murtherers, and that for ever, until it be done.

11. The *Lunatics* are also but few, viz. 158 in 229250, though I fear many more than are set down in our *Bills*, few being entred for such, but those who die at *Bedlam*; and there all seem to dye of their *Lunacy*, who died *Lunatics*; for there is much difference in computing the number of *Lunatics*, that die (though of *Fevers* and all other Diseases, unto which *Lunacy* is no *Supersedeas*) and those that dye by reason of their *Madness*.

12. So that, this *Casualty* being so uncertain, I shall not force my self to make any inference from the numbers and proportions we find in our *Bills* concerning it: only I dare ensure any man at this present, well in his Wits, for one in a thousand, that he shall not dye a *Lunatick* in *Bedlam* within these seven years, because I find not above one in about one thousand five hundred have done so.

13. The like use may be made of the *Accompts* of men that made away themselves; who

who are another sort of Mad men, that think to ease themselves of pain by leaping into *Hell*; or else are yet more Mad, so as to think there is no such place; or that men may go to rest by death, though they dye in *Self-murther*, the greatest Sin.

14. We shall say nothing of the numbers of those that have been *Drowned*, *Killed by falls from Scaffolds*, or by *Carts running over them*, &c. because the same depends upon the casual Trade and Employment of men, and upon matters which are but circumstantial to the seasons and Regions we live in, and affords little of that Science and Certainty we aim at.

15. We find one *Casualty* in our Bills, of which, though there be daily talk, there is little effect, much like our abhorrence of *Toads* and *Snakes* as most poisonous Creatures, whereas few men dare say upon their own knowledge they ever found harm by either; and this *Casualty* is the *French Pox*, gotten, for the most part, not so much by the intemperate use of *Venery* (which rather causeth the *Gout*) as of many common Women.

16. I say, the *Bills of Mortality* would take off these Bars, which keep some men within bounds, as to these extravagancies: for in  
the

the aforementioned 229250, we find not above 392 to have died of the *Pox*. Now, forasmuch as it is not good to let the World be lulled into a security and belief of Impunity by our *Bills*, which we intend shall not be only as *Deaths heads* to put men in mind of their *Mortality*, but also as *Mercurial Statues* to point out the most dangerous waies that lead us into it and misery; We shall therefore shew, that the *Pox* is not as the *Toads* and *Snakes* aforementioned, but of a quite contrary nature, together with the reason why it appears otherwise.

17. Forasmuch as by the ordinary discourse of the World it seems a great part of men have, at one time or other, had some *species* of this Disease, I wondering why so few died of it, especially because I could not take that to be so harmless, whereof so many complained very fiercely; upon enquiry, I found that those who died of it out of the Hospitals (especially that of *Kingsland*, and the *Lock* in *Southwark*) were returned of *Ulcers* and *Sores*. And in brief, I found, that all mentioned to dye of the *French Pox* were returned by the *Clerks* of *Saint Giles's* and *Saint Martin's in the Fields* only, in which place I understood that most of the vilest and most miserable Houses of Uncleaness



cleanness were : from whence I concluded, that only *hated* persons, and such, whose very *Noses* were eaten off, were reported by the *Searchers* to have died of this too frequent *Malady*.

18. In the next place, it shall be examined, under what Name or *Casualty* such as die of these Diseases are brought in : I say, under the *Consumption* ; forasimuch as all dying thereof dye so emaciated and lean ( their *Ulcers* disappearing upon Death ) that the Old-women *Searchers*, after the mist of a Cup of *Ale*, and the bribe of a Two-groat fee, instead of one given them, cannot tell whether this emaciation or leanness were from a *Phtisis*, or from an *Hectick Fever*, *Atrophy*, &c. or from an Infection of the *Spermatick* parts, which in length of time, and in various disguises hath at last vitiated the habit of the Body, and by disabling the parts to digest their nourishment, brought them to the condition of leanness above mentioned.

19. My next Observation is, That of the *Rickets* we find no mention among the *Casualties*, until the Year 1634, and then but of 14 for that whole Year.

20. Now the Question is, Whether that Disease did first appear about that time ; or whether a Disease, which had been long before,



fore, did then first receive its Name?

21. To clear this Difficulty out of the Bills (for I dare venture on no deeper Arguments) I enquired what other Casualtie before the Year 1634, named in the Bills, was most like the *Rickets*; and found, not only by Pretenders to know it, but also from other Bills, that *Livergrown* was the nearest. For in some years I find *Livergrown*, *Spleen*, and *Rickets*, put all together, by reason (as I conceive) of their likeness to each other. Hereupon I added the *Livergrowns* of the Year 1634, viz. 77; to the *Rickets* of the same Year, viz. 14, making in all 91: which Total, as also the Number 77 it self, I compared with the *Livergrown* of the precedent Year 1633, viz. 82: All which shewed me, that the *Rickets* was a new Disease over and above.

22. Now, this being but a faint Argument, I looked both forwards and backwards, and found, that in the Year 1629, when no *Rickets* appeared, there were but 94 *Livergrowns*; and in the Year 1636 there were 99 *Livergrown*, although there were also 50 of the *Rickets*: only this is not to be denied, that when the *Rickets* grew very numerous (as in the Year 1660, viz. 521) then there appeared not above 15 of *Livergrown*.

23. In the Year 1659 were 441 *Rickets*, and 8 *Livergrown*. In the Year 1658 were 476 *Rickets*, and 51 *Livergrown*. Now, though it be granted that these Diseases were confounded in the Judgment of the *Nurses*, yet it is most certain, that the *Livergrown* did never but once, viz. *Anno* 1630 exceed 100; whereas *Anno* 1660, *Livergrown* and *Rickets* were 536.

24. It is also to be observed, That the *Rickets* were never more numerous than now, and that they are still increasing; for *Anno* 1649, there were but 190, next year 260, next after that 329, and so forwards, with some little starting backwards in some years, until the Year 1660, which produced the greatest of all.

25. Now, such back-startings seem to be universal in all things; for we do not only see in the progressive motion of the wheels of *Watches*, and in the rowing of *Boats*, that there is a little starting or jerking backwards between every step forwards, but also (if I am not much deceived) there appeared the like in the motion of the *Moon*, which in the long *Telescopes* at *Gresham Colledge* one may sensibly discern.

26. There

26. There seems also to be another new Disease, called by our Bills *The stopping of the Stomach*, first mentioned in the Year 1636, the which *Malady*, from that Year to 1647, increased but from 6 to 29; *Anno* 1655 it came to 145. In 57, to 277. In 60 to 314. Now these proportions far exceeding the difference of proportion generally arising from the increase of Inhabitants; and from the resort of *Advenæ* to the City, shews there is some new Disease, which appeareth to the Vulgar, as *A stopping of the Stomach*.

27. Hereupon I apprehended that this *Stopping* might by the *Green-sickness*, forasmuch as I find few or none to have been returned upon that Account, although many be visibly stained with it. Now, whether the same be forborn out of shame, I know not: For since the World believes that Marriage cures it, it may seem indeed a shame, that any Maid should dye uncured, when there are more *Males* than *Females*, that is, an overplus of Husbands to all that can be Wives.

28. In the next place, I conjectured that this *stopping of the Stomach* might be the *Mother*, forasmuch as I have heard of many troubled with *Mother-fits* (as they call them)

although few returned to have died of them; which conjecture, if it be true, we may then safely say, That the *Mother-fits* have also increased.

29. But I was somewhat taken off from thinking this *stopping of the Stomach* to be the *Mother*, because I guessed rather the *Rising of the Lights* might be it. For I remembered that some Women, troubled with the *Mother-fits*, did complain of a *choaking in their Throats*. Now, as I understand, it is more conceivable, that the *Lights* or *Lungs* (which I have heard called *The Bellows of the Body*) not blowing, that is, neither venting out, nor taking in breath, might rather cause such a *Choking*, than that the *Mother* should rise up thither, and do it. For methinks, when a Woman is with Child, there is a greater rising, and yet no such Fits at all.

30. But what I have said of the *Rickets* and *stopping of the Stomach*, I do in some measure say of the *Rising of the Lights* also, viz. that these *Risings* (be they what they will) have increased much above the general proportion; for in 1629 there were but 44, and in 1660, 249, viz. almost six times as many.

31. Now

31. Now forasmuch as *Rickets* appear much in the *Overgrowing* of *Childrens Livers* and *Spleens* (as by the *Bills* may appear) which surely may cause *stopping of the Stomach* by squeezing and crowding upon that part. And forasmuch as these *Chokings* or *Risings of the Lights* may proceed from the same stuffings, as make the *Liver* and *Spleen* to over-grow their due proportion. And lastly, forasmuch as the *Rickets*, *stopping of the Stomach*, and *rising of the Lights*, have all increased together, and in some kind of correspondent proportions; it seems to me that they depend one upon another, And that what is the *Rickets* in Children, may be the other in more grown Bodies; for surely Children, which recover of the *Rickets*, may retain somewhat to cause what I have imagined: but of this let the Learned *Physicians* consider, as I presume they have.

32. I had not medled thus far, but that I have heard, the first hints of the circulation of the Blood were taken from a common Person's wondering what became of all the blood which issued out of the heart, since the heart beats above three thousand times an hour, although but one drop should be pump'd out of it at every stroke.

33. The *Stone* seemed to decrease: for in 1632, 33, 34, 35, and 36, there died of the *Stone* and *Strangury* 254. And in the Years 1655, 56, 57, 58, 59, and 1660, but 250, which numbers, although indeed they be almost equal, yet considering the Burials of the first named five Years were but half those of the later, it seems to be decreased by about one half.

34. Now the *Stone* and *Strangury* are Diseases which most men know that feel them, unless it be in some few cases, where (as I have heard *Physicians* say) a *Stone* is held up by the *Films* of the *Bladder*, and so kept from grating or offending it.

35. The *Gout* stands much at a stay, that is, it answers the general proportion of Burials; there dies not above one of 1000 of the *Gout*, although I believe that more dye *Gouty*. The reason is, because those that have the *Gout*, are said to be *long livers*; and therefore, when such dye, they are returned as *Aged*.

36. The *Scurvy* hath likewise increased, and that gradually from 12, Anno 1629, to 95, Anno 1660.

37. The *Tyffick* seems to be quite worn away, but that it is probable the same is entered as *Cough* or *Consumption*.

38. *Agues*



*Agues* and *Fevers* are entred promiscuouſly, yet in the few Bills wherein they have been diſtinguiſhed, it appears that not above 1 in 40 of the whole are *Agues*.

39. The *Abortives* and *Stillborn* are about the twentieth part of thoſe that are *Chriſt-ned*, and the numbers ſeemed the ſame thirty Years ago as now, which ſhews there were more in proportion in thoſe years than now : or elſe that in theſe later years due Accompts have not been kept of the *Abortives*, as having been buried without notice, and perhaps not in *Church-yards*.

40. For that there hath been a neglect in the Accompts of the *Chriſtnings*, is moſt certain, becauſe until the Year 1642, we find the *Burials* but equal with the *Chriſtnings*, or near thereabouts, but in 1648, when the differences in *Religion* had changed the Government, the *Chriſtnings* were but two thirds of the *Burials*. And in the Year 1659, not half, viz. the *Burials* were 14720 (of the *Plague* but 36) and the *Chriſtnings* were but 5670; which great diſproportion could be from no other Cauſe than that abovementioned, for- aſmuch as the ſame grew as the Confuſions and Changes grew.



41. Moreover, although the Bills give us in *Anno* 1659, but 5670 *Christnings*, yet they give us 421 *Abortives*, and 226 dying in *Child-bed*; whereas in the Year 1631, when the *Abortives* were 410, that is, near the number of the Year 1659, the *Christnings* were 3288. Wherefore by the proportion of *Abortives*, *Anno* 1659, the *Christnings* should have been about 8500: but if we shall reckon by the Women dying in *Childbed*, of whom a better Accompt is kept than of *Stillborns* and *Abortives*, we shall find *Anno* 1659, there were 226 *Childbeds*; and *Anno* 1631, 112, viz. not  $\frac{1}{2}$ : Wherefore I conceive that the true number of the *Christnings*, *Anno* 1659, is above double to the 5690 set down in our Bills; that is, about 11500, and then the *Christnings* will come near the same proportion to the *Burials*, as hath been observed in former times.

42. In regular Times, when Accompts were well kept, we find that not above three in 200 died in *Childbed*, and that the number of *Abortives* was about treble to that of the Women dying in *Childbed*: from whence we may probably collect, that not one Woman of an hundred (I may say of two hundred) dies in her Labour; forasmuch as there be other Causes of a Womans dying with-  
in

in the Month, than the hardness of her Labour.

43. If this be true in these Countries, where Women hinder the facility of their *Child-bearing* by affected straitening of their Bodies; then certainly in *America*, where the same is not practised, Nature is little more to be taxed as to Woman, than in *Brutes*, among whom not one in some thousands do dye of their Deliveries: what I have heard of the *Irish women* confirms me herein.

44. Before we quite leave this matter, we shall insert the Causes, why the Accompt of *Christnings* hath been neglected more than that of *Burials*: one, and the chief whereof, was a Religious Opinion against *Baptizing of Infants*, either as unlawful, or unnecessary. If this were the only reason, we might by our defects of this kind conclude the growth of this Opinion, and pronounce, that not half the People of *England*, between the years 1650 and 1660, were convinced of the need of *Baptizing*.

45. A second Reason was, The scruples which many publick *Ministers* would make of the worthiness of Parents to have their Children Baptized, which forced such questioned Parents, who did also not believe the necessity of having their Children *baptized*  
by

by such Scruplers, to carry their Children unto such other *Ministers*, as having performed the thing, had not the Authority or Command of the *Register* to enter the Names of the *baptized*.

46. A third Reason was, That a little Fee was to be paid for the *Registry*.

47. Upon the whole matter it is most certain, That the number of *Heterodox* Believers was very great between the said year 1650 and 1660; and so peevish were they, as not to have the Births of their Children *Registered*, although thereby the time of their coming of Age might be known, in respect of such Inheritances as might belong unto them; and withal, by such *Registring* it would have appeared unto what *Parish* each Child had belonged, in case any of them should happen to want its relief.

48. Of *Convulsions* there appeared very few, *viz.* but 52 in the year 1629, which in 1636 grew to 709, keeping about that stay till 1659, though sometimes rising to about 1000.

49. It is to be noted, That from 1629 to 1636, when the *Convulsions* were but few, the number of *Chrysome*s and *Infants* was greater: for in 1629, there were of *Chrysome*s and *Infants* 2596, and of the *Convulsion* 52,  
*viz.*

*viz.* of both 2648. And in 1636 there were of *Infants* 1895, and of the *Convulsions* 709; in both 2604, by which it appears, that this difference is likely to be only a confusion in the Accounts.

50. Moreover, we find that for these latter years, since 1636, the total of *Convulsions* and *Chrysoms* added together are much less, *viz.* by about 400 or 500 *per Annum*, than the like Totals from 1629 to 36, which makes me think, that *Teeth* also were thrust in under the Title of *Chrysoms* and *Infants*, inasmuch as in the said years, from 1629 to 1636, the number of *Worms* and *Teeth* wants by above 400 *per Annum* of what we find in following years.

## C H A P. IV.

*Of the Plague.*

I. **B**Efore we leave to discourse of the *Casualties*, we shall add something concerning that greatest *Disease* or *Casualty* of all, The *Plague*.

There have been in *London*, within this Age, four times of great *Mortality*, that is to say, the years 1592 and 1593, 1603, 1625 and 1636.

There died *Anno* 1592, from *March* to *December*,

Whereof of the *Plague* 25886 11503

*Anno* 1593, 17844

Whereof of the *Plague* 10662

*Christned* in the said year 4021

*Anno* 1603, within the same space of time, were Buried 37294

Whereof of the *Plague* 30561

*Anno* 1625, within the same space 51758

Whereof of the *Plague* 35417

*Anno* 1636, from *April* to *Decemb.* 23359

Whereof of the *Plague* 10460

2. Now

2. Now it is manifest of it self, in which of these years most died ; but in which of them was the greatest *Mortality* of all Diseases in general, or of the *Plague* in particular, we discover thus. In the Years 1592, and 1636, we find the proportion of those dying of the *Plague* in the whole to be near alike, that is, about 10 to 23, or 11 to 25, or as about 2 to 5.

3. In the Year 1625, we find the *Plague* to bear unto the whole in proportion as 35 to 51, or 7 to 10, that is almost the triplicate of the former proportion ; for the *Cube* of 7 being 343, and the *Cube* of 10 being 1000, the said 343 is not  $\frac{1}{5}$  of 1000:

4. In *Anno* 1603, the proportion of the *Plague* to the whole was as 30 to 37, viz. as 4 to 5, which is yet greater than the last of 7 to 10 : For if the year 1625 had been as great a *Plague* year as 1603, there must have died not only 7 to 10, but 8 to 10, which in those great numbers makes a vast difference.

5. We must therefore conclude the year 1603 to have been the greatest *Plague* year of this Age.

6. Now to know in which of these four was the greatest *Mortality* at large, we reason thus :



<i>Anno</i>	{ Buried	26490	{ or { 6
1592		4277	
	{ Christned		

<i>Anno</i>	{ There died in the whole	38244	{ or { 8
1603		year of all	
	{ Christned		

1 to 8, or	{ <i>Anno</i>	{ Died in the	{ or { 8
1 $\frac{1}{4}$ to 10			
	{ 1625	54265	
		{ Christned 6983	

<i>Anno</i>	{ There died, <i>ut supra</i> ,	23359	{ or { 5
1636		9522	
	{ Christned		

7. From whence it appears, That *Anno* 1636, the Christnings were about  $\frac{2}{7}$  parts of the Burials: *Anno* 1592 but  $\frac{1}{6}$ ; but in the year 1603, and 1625, not above an eighth: so that the said two years were the years of greatest *Mortality*. We said that the year 1603 was the greatest *Plague* year. And now we say, that the same was not a greater year of *Mortality* than *Anno* 1625. Now to reconcile these two Positions, we must alledge, that *Anno* 1625, there was an error in the Accompts or Distinctions of the *Casualties*; that is, more died of the *Plague* than were re-counted



counted for under that name. Which Allegation we also prove thus, *viz.*

8. In the said year 1625 there are said to have died of the *Plague* 35417, and of all other Diseases 18848; whereas in the years, both before and after the same, the ordinary number of Burials was between 7 and 8000; so that if we add about 11000 (which is the difference between 7 and 18) to our 35, the whole will be 46000, which bears to the whole 54000, as about 4 to 5, thereby rendering the said year 1625 to be as great a *Plague*-year as that of 1603, and no greater; which answers to what we proved before, *viz.* that the *Mortality* of the two years was equal.

9. From whence we may probably suspect, that about  $\frac{1}{4}$  part more died of the *Plague* than are returned for such; which we further prove by noting, that *Anno* 1636 there died 10400 of the *Plague*, the  $\frac{1}{4}$  whereof is 2600. Now there are said to have died of all other Diseases that Year 12959, out of which number deducting 2600, there remain 10359, more than which there died not in several years next before and after the said Year 1636.

10. The next Observation we shall offer is, That the *Plague* of 1603 lasted eight Years.

In some whereof there died above 4000, in others above 2000, and in but one fewer than 600 : whereas in the Year 1624 next preceding, and in the Year 1626 next following the said great *Plague*-year 1625, there died in the former but 11, and in the later but 134 of the *Plague*. Moreover, in the said Year 1625, the *Plague* decreased from its utmost number 4461 a week, to below 1000 within six weeks.

11. The *Plague* of 1636 lasted twelve Years, in eight whereof there died 2000 *per annum* one with another, and never under 300. The which shews, that the Contagion of the *Plague* depends more upon the Disposition of the *Air*, than upon the *Effluvia* from the Bodies of men.

12. Which also we prove by the suddain jumps which the *Plague* hath made, leaping in one Week from 118 to 927 ; and back again from 993 to 258 ; and from thence again the very next Week to 852. The which Effects must surely be rather attributed to change of the *Air*, than of the Constitution of Mens Bodies, otherwise than as this depends upon that.

13. It may be also noted, That many times other *Pestilential* Diseases, as *Purple Fevers*, *Small-Pox*, &c. do fore-run the *Plague* Year,

Year, two or three; for in 1622 there died but 8000: in 1623, 11000: in 1624, about 12000: till in 1625 there died of all Diseases above 54000.

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## CHAP. V.

### *Other Observations upon the Plague, and Casualties.*

1. **T**HE *Decrease and Increase* of People is to be reckoned chiefly by *Christenings*, because few bear Children in London but *Inhabitants*, though others die there. The Accounts of *Christenings* were well kept, until differences in *Religion* occasioned some neglect therein, although even these neglects we must confess to have been regular and proportionable.

2. By the numbers and proportions of *Christenings* therefore we observe as followeth, viz.

First, That (when from *December* 1602, to *March* following, there was little or no *Plague*) then the *Christenings* at a *Medium* were between 110 and 130 *per Week*, few

*Weeks* being above the one, or below the other; but when from thence to *July* the *Plague* increased, that then the *Christenings* decreased to under 90.

Secondly, The Question is, Whether *Teeming-Women* died, or fled, or miscarried? The latter at this time seems most probable, because even in the said space, between *March* and *July*, there died not above 20 *per Week* of the *Plague*; which small number could neither cause the death or flight of so many Women, as to alter the proportion  $\frac{1}{4}$  part lower.

3. Moreover, We observe from the 21 of *July* to the 12 of *October*, the *Plague* increasing reduced the *Christenings* to 70 at a *Medium*, diminishing the above proportion down to  $\frac{2}{5}$ . Now the cause of this must be flying, and death, as well as Miscarriages and Abortions; for there died within that time about 25000, whereof many were certainly *Women-with-child*: besides, the fright of so many dying within so small a time, might drive away so many others, as to cause this Effect.

4. From *December* 1624, to the middle of *April* 1625, there died not above five a *Week* of the *Plague*, one with another. In this time, the *Christenings* were one with another

ther 180. The which decreased gradually by the 22 of *September* to 75, or from the proportion of 12 to 5, which evidently squares with our former Observation.

5. The next Observation we shall offer is, The time, wherein the City hath been *Re-peopled* after a great *Plague*; which we affirm to be by the second year. For in 1627 the *Christenings* (which are our Standard in this Case) were 8408, which in 1624, next preceding the *Plague*-year 1625 (that had swept away above 54000) were but 8299; and the *Christenings* of 1626 (which were but 6701) mounted in one year to the said 8408.

6. Now the Cause hereof, forasmuch as it cannot be a supply by Procreations; *Ergo*, it must be by new Affluxes to *London* out of the Country.

7. We might fortifie this Assertion by shewing, that before the *Plague*-year 1603, the *Christenings* were about 6000, which were in that very year reduced to 4789, but crept up the next year 1604 to 5458, recovering their former ordinary proportion in 1605 of 6504, about which proportion it stood till the year 1610.

8. I say, it followeth, that, let the *Mortality* be what it will, the City repairs its loss of Inhabitants within two years; which Ob-



servation lessens the Objection made against the value of Houses in *London*, as if they were liable to great prejudice through the loss of Inhabitants by the *Plague*.

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CH A P. VI.

*Of the Sickliness, Healthfulness, and Fruitfulness of Seasons.*

I. **H**AVING spoken of *Casualties*, we come next to compare the Sickliness, Healthfulness, and Fruitfulness of the several Years and Seasons one with another. And first, having in the Chapters afore going mentioned the several years of *Plague*, we shall next present the several other sickly years; we meaning by a *sickly Year* such wherein the *Burials* exceed those, both of the precedent and subsequent years, and not above two hundred dying of the *Plague*, for such we call *Plague-Years*; and this we do, that the World may see, by what spaces and intervals we may hereafter expect such times again. Now, we may not call that a more sickly year, wherein more die, because such excess of *Burials* may

may proceed from increase and access of People to the City only.

2. Such sickly years were 1618, 20, 23, 24, 1632, 33, 34, 1649, 52, 54, 56, 58, 61, as may be seen by the Tables.

3. In reference to this Observation we shall present another, namely, That the more sickly the years are, the less fecund or fruitful of Children also they be. Which will appear, if the number of Children born in the said sickly years be less than that of the years both next preceding and next following: all which, upon view of the Tables, will be found true, except in a very few Cases, where sometimes the precedent, and sometimes the subsequent years vary a little, but never both together. Moreover, for the confirmation of this Truth, we present you the year 1660, where the *Burials* were fewer than in either of the two next precedent years by 2000, and fewer than in the subsequent by above 4000. And withal, the number of *Christenings* in the said year 1660 was far greater than in any of the three years next afore-going.

4. As to this year 1660, although we would not be thought *Superstitious*, yet it is not to be neglected, that in the said year was the *King's Restauration* to His Empire over these three Nations, as if God Almighty had



caused the healthfulness and fruitfulness thereof to repair the *Bloodshed* and *Calamities* suffered in His absence. I say, this conceit doth abundantly counterpoise the Opinion of those who think great *Plagues* come in with *King's* Reigns, because it hapned so twice, viz. *Anno* 1603, and 1625; whereas as well the year 1648, wherein the present *King* commenced His Right to reign, as also the year 1660, wherein He commenced the exercise of the same, were both eminently healthful: which clears both *Monarchy*, and our present *King's Family*, from what seditious men have surmised against them.

5. The Diseases, which beside the *Plague* make years unhealthful in this City, are *Spotted-Fevers*, *Small-Pox*, *Dysentery*, called by some *The Plague in the Guts*, and the unhealthful Season is the *Autumn*.

## C H A P. VII.

*Of the difference between Burials and Christenings.*

1. **T**H E next Observation is, That in the said Bills there are far more *Burials* than *Christenings*. This is plain, depending only upon *Arithmetical* computation; for, in 40 years, from the year 1603, to the year 1644, *exclusive* of both years, there have been set down (as hapning within the same ground, space, or Parishes) although differently numbred and divided, 363935' *Burials*, and but 330747 *Christenings* within the 97, 16, and 10 Out Parishes; those of *Westminster*, *Lambeth*, *Newington*, *Redriff*, *Stepney*, *Hackney*, and *Islington*, not being included.

2. From this single Observation it will follow, That *London* should have decreased in its People; the contrary whereof we see by its daily increase of Buildings upon new Foundations, and by the turning of great Palacious Houses into small Tenements. It is therefore

fore certain, that *London* is supplied with People from out of the Country, whereby not only to supply the overplus differences of *Burials* above mentioned, but likewise to increase its *Inhabitants* according to the said increase of housing.

3. This supplying of *London* seems to be the reason, why *Winchester*, *Lincoln*, and several other Cities have decreased in their Buildings, and consequently in their *Inhabitants*. The same may be suspected of many Towns in *Cornwal*, and other places, which probably, when they were first allowed to send *Burgesses* to the *Parliament*, were more populous than now, and bore another proportion to *London* than now; for several of those *Burroughs* send two *Burgesses*, whereas *London* it self sends but four, although it bears the fifteenth part of the charge of the whole Nation in all *Publick Taxes* and *Levies*.

4. But, if we consider what I have upon exact enquiry found true, *viz.* That in the Country, within ninety years, there have been 6339 *Christenings*, and but 5280 *Burials*, the increase of *London* will be salved without inferring the decrease of the People in the Country; and withal, in case all *England* have but fourteen times more People than

*Lon-*

*London*, it will appear, how the said increase of the Country may increase the People, both of *London* and it self; for if there be in the 97, 16, 10, and 7 Parishes, usually comprehended within our Bills, but 460000 Souls, as hereafter we shall shew, then there are in all *England* and *Wales* 6440000 Persons, out of which subtract 460000, for those in and about *London*, there remain 5980000 in the Country, the which increasing about  $\frac{1}{7}$  part in 40 years, as we shall hereafter prove doth happen in the Country, the whole increase of the Country will be about 854000 in the said time; out of which number, if but about 250000 be sent up to *London* in the said 40 years, *viz.* about 6000 *per Annum*, the said *Missions* will make good the alterations, which we find to have been in and about *London*, between the years 1603 and 1644 above-mentioned: But that 250000 will do the same, I prove thus; *viz.* in the 8 years, from 1603 to 1612, the *Burials* in all the Parishes, and of all Diseases, the *Plague* included, were at a *Medium* 9750 *per Annum*. And between 1635 and 1644 were 18000, the difference whereof is 8250, which is the Total of the increase of the *Burials* in 40 years, that is, about 206 *per Annum*. Now, to make the *Burials* increase 206 *per Annum*, there must be

be added to the City 30 times as many (according to the proportion of 3 dying out of 11 Families) *viz.* 6180 *Advena*, the which number multiplied again by the 40 years, makes the Product 247200, which is less than the 250000 above-propounded; so as there remain above 600000 of increase in the Country within the said 40 years, either to render it more populous, or send forth into other Colonies, or Wars. But that *England* hath fourteen times more People, is not improbable, for the Reasons following.

1. *London* is observed to bear about the fifteenth proportion of the whole Tax.

2. There are in *England* and *Wales* about 39000 square Miles of Land, and we have computed that in one of the greatest Parishes in *Hants*hire, being also a Market-Town, and containing twelve square Miles, there are 220 Souls in every square Mile, out of which I abate  $\frac{1}{4}$  for the over-plus of People more in that Parish than in other wild Counties. So as the  $\frac{3}{4}$  parts of the said 220, multiplied by the Total of square Miles, produces 6400000 Souls in all *London* included.

3. There are about 10000 Parishes in *England* and *Wales*, the which, although they should not contain the  $\frac{2}{3}$  part of the Land, nor the  $\frac{1}{4}$  of the People of that Country-Parish,

rish, which we have examined, yet may be supposed to contain about 600 People, one with another: according to which Account there will be six Millions of People in the Nation. I might add, that there are in *England* and *Wales* about five and twenty Millions of Acres at  $16 \frac{1}{2}$  Foot to the Perch; and if there be six Millions of People, then there is about four Acres for every head, which how well it agrees to the Rules of Plantation, I leave unto others, not only as a means to examine my Assertion, but as an hint to their enquiry concerning the fundamental Trade, which is Husbandry, and Plantation.

4. Upon the whole matter we may therefore conclude, That the People of the whole Nation do increase, and consequently the decrease of *Winchester*, *Lincoln*, and other like places, must be attributed to other Reasons, than that of re-furnishing *London* only.

5. We come to shew, why although in the Country the *Christenings* exceed the *Burials*, yet in *London* they do not. The general Reason of this must be, that in *London* the proportion of those subject to die, unto those capable of breeding, is greater than in the Country; That is, let there be an hundred Persons in *London*, and as many in the Country; we say, that, if there be sixty of them  
Breed-



Breeders in *London*, there are more than sixty in the Country, or else we must say, that *London* is more unhealthful, or that it inclines Men and Women more to Barrenness, than the Country : which by comparing the Burials and Christenings of *Hackney*, *Newington*, and the other Country-Parishes, with the most *Smoky* and *Stinking* parts of the City, is scarce discernible in any considerable degree.

6. Now that the Breeders in *London* are proportionably fewer than those in the Country, arises from these Reasons, *viz.*

1. All, that have business to the Court of the King, or to the Courts of Justice, and all Country-men coming up to bring Provisions to the City, or to buy Foreign Commodities, Manufactures, and Rarities, do for the most part leave their Wives in the Country.

2. Persons coming to live in *London* out of curiosity and pleasure, as also such as would retire and live privately, do the same, if they have any.

3. Such as come up to be cured of Diseases do scarce use their Wives *pro tempore*.

4. That many Apprentices of *London*, who are bound seven or nine years from Marriage, do often stay longer voluntarily.

5. That



5. That many Sea-men of *London* leave their Wives behind them, who are more subject to die in the absence of their Husbands, than to breed either without men, or with the use of many promiscuously.

6. As for unhealthiness, it may well be supposed, that although seasoned Bodies may, and do live near as long in *London*, as elsewhere, yet new-comers and Children do not: for the *Smoaks, Stinks*, and close *Air*, are less healthful than that of the Country; otherwise why do sickly Persons remove into the *Country-Air*? And why are there more old men in Countries than in *London, perrata*? And although the difference in *Hackney* and *Newington*, above-mentioned, be not very notorious, yet the reason may be their vicinity to *London*, and that the Inhabitants are most such, whose Bodies have first been impaired with the *London-Air*, before they withdraw thither.

7. As to the causes of Barrenness in *London*, I say, that although there should be none extraordinary in the Native *Air* of the place; yet the intemperance in feeding, and especially the Adulteries and Fornications, supposed more frequent in *London* than elsewhere, do certainly hinder Breeding. For a Woman, admitting ten Men, is so far from ha-

having ten times as many Children, that she hath none at all.

8. Add to this, that the minds of men in *London* are more thoughtful, and full of business, than in the Country, where their work is *corporal* Labour and Exercises ; All which promote Breeding, whereas *Anxieties* of the mind hinder it.

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## C H A P. VIII.

### *Of the difference between the numbers of Males and Females.*

**T**H E next Observation is, That there be more *Males* than *Females*.

1. There have been Buried from the year 1628, to the year 1662, *exclusive*, 209436 *Males*, and but 190474 *Females* : but it will be objected, That in *London* it may be indeed so , though otherwise elsewhere ; because *London* is the great Stage and Shop of business, wherein the *Masculine Sex* bears the greatest part. But we Answer, That there have been also *Christened* within the same time 139782 *Males*, and but 130866 *Females*, and that the

the Country-Accounts are consonant enough to those of *London* upon this matter.

2. What the Causes hereof are, we shall not trouble our selves to conjecture, as in other Cases: only we shall desire, that Travellers would enquire, whether it be the same in other Countries.

3. We should have given an Account, how in every Age these proportions change here, but that we have Bills of distinction but for 32 years, so that we shall pass from hence to some Inferences from this Conclusion; as first,

I. That *Christian Religion*, prohibiting *Polygamy*, is more agreeable to the *Law of Nature*, that is, the *Law of God*, than *Mahometism*, and others, that allow it: for one Man his having many Women, or Wives, by Law, signifies nothing, unless there were many Women to one Man in Nature also.

II. The obvious Objection hereunto is, That one *Horse*, *Bull*, or *Ram*, having each of them many *Females*, do promote increase. To which I Answer, That although perhaps there be naturally, even of these *species*, more *Males* than *Females*, yet *artificially*, that is, by making *Geldings*, *Oxen*, and *Weathers*, there are fewer. From whence it will follow, That when by experience it is found how ma-

ny *Ews* (suppose twenty) one *Ram* will serve, we may know what proportion of *male-Lambs* to castrate or geld, *viz.* nineteen, or thereabouts: for if you emasculate fewer, *viz.* but ten, you shall, by promiscuous copulation of each of those ten with two *Females*, hinder the increase, so far as the admittance of two *Males* will do it: but, if you castrate none at all, it is highly probable, that, every of the twenty *Males* copulating with every of the twenty *Females*, there will be little or no conception in any of them all.

III. And this I take to be the truest Reason, why *Foxes*, *Wolves*, and other *Vermin Animals*, that are not gelt, increase not faster than *Sheep*, when as so many thousands of these are daily Butchered, and very few of the other die otherwise than of themselves.

4. We have hitherto said, There are more *Males* than *Females*; we say next, That the one exceed the other by about a thirteenth part. So that although more Men die violent deaths than Women, that is, more are slain in *Wars*, killed by *Mischance*, drowned at *Sea*, and die by the *Hand of Justice*; moreover, more Men go to *Colonies*, and travel into *Foreign* parts, than Women; and lastly, more remain unmarried than of Women, as *Fellows of Colleges*, and *Apprentices* above eighteen,  
*&c.*

Ec. yet the said thirteenth part difference bringeth the business but to such a pass, that every Woman may have an Husband, without the allowance of *Polygamy*.

5. Moreover, although a Man be *Prolifick* fourty years, and a Woman but five and twenty, which makes the *Males* to be as 560 to 325 *Females*, yet the causes above-named, and the later marriage of the Men, reduce all to an equality.

6. It appearing, that there were fourteen Men to thirteen Women, and that they die in the same proportion also; yet I have heard *Physicians* say, that they have two Women Patients to one Man, which Assertion seems very likely; for that Women have either the *Green-sickness*, or other like Distempers, are sick of *Breedings*, *Abortions*, *Child-bearing*, *Sore-breasts*, *Whites*, *Obstructions*, *Fits of the Mother*, and the like.

7. Now, from this it should follow, that more Women should die than Men, if the number of *Burials* answered in proportion to that of Sickneses: but this must be salved, either by the alleging, that the *Physicians* cure those Sickneses, so as few more die than if none were sick; or else that Men, being more intemperate than Women, die as much by reason of their Vices, as Women do by the Infir-

mity of their *Sex* ; and consequently, more *Males* being born than *Females*, more also die.

8. In the year 1642 many *Males* went out of *London* into the Wars then beginning, inſomuch as I expected in the ſucceeding year 1643 to have found the *Burials* of *Females* to have exceeded thoſe of *Males*, but no alteration appeared ; forasmuch , as I ſuppoſe, Trading continuing the ſame in *London*, all thoſe, who loſt their *Apprentices*, had others out of the Country ; and if any left their Trades and Shops , that others forthwith ſucceeded them : for, if employment for hands remain the ſame, no doubt but the number of them could not long continue in diſproportion.

9. Another pregnant Argument to the ſame purpoſe (which hath already been touched on) is, That although in the very year of the *Plague* the *Chriſtenings* decreased , by the dying and flying of *Teeming-Women*, yet the very next year after they increased ſomewhat, but the ſecond after to as full a number as in the ſecond year before the ſaid *Plague*: for I ſay again, if there be encouragement for an hundred in *London*, that is, a Way how an hundred may live better than in the Country, and if there be void Houſing there to receive them,



them, the evacuating of a fourth or third part of that number must soon be supplied out of the Country; so as the great *Plague* doth not lessen the Inhabitants of the City, but of the Country, who in a short time remove themselves from thence hither, so long, until the City, for want of receipt and encouragement, regurgitates and sends them back.

10. From the difference between *Males* and *Females*, we see the reason of making *Eunuchs* in those places where *Polygamy* is allowed, the later being useless as to multiplication, without the former, as was said before in case of *Sheep* and other *Animals* usually gelt in these Countries.

11. By consequence, this practice of *Castration* serves as well to promote increase, as to meliorate the Flesh of those Beasts that suffer it. For that Operation is equally practised upon *Horses*, which are not used for food, as upon those that are.

12. In *Popish* Countries, where *Polygamy* is forbidden, if a greater number of *Males* oblige themselves to *Celibate*, than the natural over-plus, or difference between them and *Females* amounts unto; then multiplication is hindred: for if there be eight Men to ten Women, all of which eight Men are married to eight of the ten Women, then the other two

bear no Children, as either admitting no Man at all, or else admitting Men as Whores (that is, more than one;) which commonly procreates no more than if none at all had been used: or else such unlawful Copulations beget Conceptions, but to frustrate them by procured Abortions, or secret Murthers; all which returns to the same reckoning. Now, if the same proportion of Women oblige themselves to a single life likewise, then such obligation makes no change in this matter of increase.

13. From what hath been said appears the reason, why the Law is and ought to be so strict against Fornications and Adulteries: for, if there were universal liberty, the Increase of Mankind would be but like that of *Foxes* at best.

14. Now forasmuch as Princes are not only Powerful, but Rich, according to the number of their People (Hands being the Father, as Lands are the Mother and Womb of Wealth) it is no wonder why States, by encouraging Marriage, and hindering Licentiousness, advance their own Interest, as well as preserve the Laws of God from contempt and violation.

15. It is a Blessing to Mankind, that by this over-plus of *Males* there is this natural  
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Bar to *Polygamy*: for in such a state Women could not live in that parity and equality of expense with their Husbands, as now, and here they do.

16. The reason whereof is, not, that the Husband cannot maintain as splendidly three, as one; for he might, having three Wives, live himself upon a quarter of his Income, that is, in a parity with all three, as well as, having but one, live in the same parity at half with her alone: but rather, because that to keep them all quiet with each other, and himself, he must keep them all in greater awe, and less splendour; which power he having, he will probably use it to keep them all as low as he pleases, and at no more cost than makes for his own pleasure; the poorest Subjects, (such as this plurality of Wives must be) being most easily governed.

## C H A P. IX.

*Of the growth of the City.*

1. **I**N the year 1593 there died in the ninety seven Parishes within the walls, and the sixteen without the walls ( besides 421 of the *Plague*) 3508. And the next year 3478, besides 29 of the *Plague*: in both years 6986. Twenty years after there died in the same ninety seven, and sixteen Parishes, 12110, viz. *Anno* 1614, 5873 ; and *Anno* 1615, 6237 : so as the said Parishes are increased, in the said time, from seven to twelve, or very near thereabouts.

2. Moreover, the *Burials* within the like space of the next twenty years, viz. *Anno* 1634 and 1635, were 15625, viz. as about twenty four to thirty one : the which last of the three numbers, 15625, is much more than double to the first 6986 ; viz. the said Parishes have in forty years increased from twenty three to fifty two.

3. Where is to be noted, That although we were necessitated to compound the said  
 ninety

ninety seven with the sixteen Parishes, yet the sixteen Parishes have increased faster than the ninety seven. For, in the year 1620, there died within the walls 2726, and in 1660 there died but 3098 (both years being clear of the *Plague* :) so as in this forty years the said ninety seven Parishes have increased but from nine to ten, or thereabouts, because the Housing of the said ninety seven Parishes could be no otherwise increased, than by turning great Houses into Tenements, and building upon a few Gardens.

4. In the year 1604 there died in the ninety seven Parishes 1518, and of the *Plague* 280. And in the year 1660, 3098, and none of the *Plague*; so as in fifty six years the said Parishes have doubled. Where note, That forasmuch as the said year 1604 was the very next year after the great *Plague* 1603 (when the City was not yet re-peopled) we shall rather make the comparison between 2014, which died *Anno* 1605, and 3431 *Anno* 1659; choosing rather from hence to assert, That the said ninety seven and sixteen Parishes increased from twenty to thirty four, or from ten to seventeen in fifty four years, than from one to two in fifty six, as in the last foregoing *Paragraph* is set down.

5. *Anno* 1605 there died in the sixteen Out-Parishes 2974, and *Anno* 1659, 6988 : so as in the fifty four years the said Parishes have increased from three to seven.

6. *Anno* 1605 there died in the eight Out-Parishes 960, *Anno* 1659 there died in the same scope of Ground, although called now ten Parishes (the *Savoy* and *Covent-Garden* being added) 4301 : so as the said Parishes have increased, within the said fifty four years, more than from one to four.

7. Moreover, there were Buried in all, *Anno* 1605, 5948, and *Anno* 1659, 14720, viz. about two to five.

8. Having set down the proportions, wherein we find the said three great Divisions of the whole Pyle, called *London*, to have increased; we come next to shew what particular Parishes have had the most remarkable share in these Augmentations. *Viz.* of the ninety seven Parishes within the Walls the increase is not discernible, but where great Houses, formerly belonging to Noblemen, before they built others near *White hall*, have been turned into Tenements; upon which Account *Alhallows upon the Wall* is increased by the conversion of the Marquess of *Winchester's* House, lately the *Spanish* Embassadour's, into a new Street; the like of Alder-

man



man *Freeman's*, and *La Motte's* near the *Exchange*; the like of the Earl of *Arundel's* in *Loth bury*; the like of the Bishop of *London's* Palace, the Dean of *Paul's*, and the Lord *River's* House now in hand; as also of the *Duke's-Place*, and others heretofore.

9. Of the sixteen Parishes, next without the Walls, Saint *Giles Cripplegate* hath been most enlarged, next to that Saint *Olaves Southwark*, then Saint *Andrew's Holborn*, then *White-Chappel*, the difference in the rest not being considerable.

10. Of the Out-Parishes, now called ten, formerly nine, and before that eight, Saint *Giles's* and Saint *Martin's in the Fields* are most increased, notwithstanding Saint *Paul's Covent-Garden* was taken out of them both.

11. The general Observation, which arises from hence, is, That the City of *London* gradually removes *Westward*, and did not the *Royal Exchange* and *London-Bridg* stay the Trade, it would remove much faster: for *Leaden-Hall-street*, *Bishop's-Gate*, and part of *Fen-Church-street*, have lost their Ancient Trade; *Grace-Church-street* indeed keeping it self yet entire, by reason of its conjunction with, and relation to *London-Bridg*.

12. Again,

12. Again, *Canning-street* and *Watlin-street* have lost their Trade of *Woollen-Drapery* to *Paul's Church-Yard*, *Ludgate hill*, and *Fleet-street*: the *Mercery* is gone from out of *Lumbard street* and *Cheap-side* into *Pater-Noster-Row* and *Fleet-street*.

13. The reasons whereof are, That the King's Court (in old times frequently kept in the City) is now always at *Westminster*. Secondly, the use of Coaches, whereunto the narrow Streets of the old City are unfit, hath caused the building of those broader Streets in *Covent-Garden*, &c.

14. Thirdly, where the *Consumption* of a Commodity is, *viz.* among the Gentry, the Venders of the same must seat themselves.

15. Fourthly, the cramming up of the void spaces and Gardens within the Walls with Houses, to the prejudice of *Light* and *Air*, have made men build new ones, where they less fear those inconveniencies.

16. Conformity in Building to other civil Nations hath disposed us to let our old Wooden dark Houses fall to decay, and to build new ones, whereby to answer all the ends above-mentioned.

17. Where note, That when *Lud-gate* was the only *Western Gate* of the City, little  
Build-

Building was *Westward* thereof: but, when *Holborn* began to increase, *New-gate* was made. But now both these Gates are not sufficient for the Communication between the Walled City, and its enlarged *Western* Suburbs, as daily appears by the intolerable stops and embarrasses of Coaches near both these Gates, especially *Lud-gate*.

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## C H A P. X.

### *Of the Inequality of Parishes.*

I. **B**Efore we pass from hence, we shall offer to consideration the Inequality of Parishes in and about *London*, evident in the proportion of their respective *Burials*; for in the same year were Buried in *Cripple-gate-Parish* 1191, that but twelve died in *Trinity-Minories*, *Saint Saviour's Southwark*, and *Botolph's Bishops-gate*, being of the middle size, as burying five and 600 *per Annum*: so that *Cripple gate* is an hundred times as big as the *Minories*, and 200 times as big as *Saint John the Evangelist's*, *Mary-Coal-Church*, *Bennet's-Grace-Church*, *Matthew-Friday-street*,

*street*, and some others within the City.

2. Hence may arise this Question, Wherefore should this Inequality be continued? If it be Answered, Because that *Pastours* of all sorts, and sizes of Abilities, may have Benefices, each man according to his merit: we Answer, That a two hundredth part of the best *Parson's* learning is scarce enough for a *Sexton*. But besides, there seems no reason of any difference at all, it being as much Science to save one single Soul, as one thousand.

3. We incline therefore to think the Parishes should be equal, or near, because, in the *Reformed Religions*, the principal use of *Churches* is to Preach in: now the bigness of such a *Church* ought to be no greater, than that unto which the voice of a *Preacher* of middling Lungs will easily extend; I say *easily*, because they speak an hour or more together.

4. The use of such large *Churches*, as *Paul's*, is now wholly lost, we having no need of saying perhaps fifty *Masses* all at one time; nor of making those grand *Processions* frequent in the *Romish Church*; nor is the shape of our *Cathedral* proper at all for our *Preaching Auditories*, but rather the Figure of an *Amphitheater* with Galleries, gradually over-looking

ing each other : for unto this Condition the Parish-Churches of *London* are driving apace, as appears by the many Galleries every day built in them.

5. Moreover, if Parishes were brought to the size of *Coalman-street*, *Alhallows-Barking*, *Christ-Church*, *Black-Friers*, &c. in each whereof die between 100 and 150 *per Annum*, then an hundred Parishes would be a fit and equal Division of this great charge, and all the *Ministers* (some whereof have now scarce fourty pounds *per Annum*) might obtain a subsistence.

6. And lastly, The *Church-Wardens* and *Over seers* of the *Poor* might find it possible to discharge their Duties, whereas now in the greater Out-Parishes many of the poorer Parishioners through neglect do perish, and many vicious persons get liberty to live as they please, for want of some heedful Eye to overlook them.

## C H A P. XI.

*Of the number of Inhabitants.*

I Have been several times in company with men of great experience in this City, and have heard them talk seldom under Millions of *People* to be in *London*: all which I was apt enough to believe, until, on a certain day, one of eminent Reputation was upon occasion asserting, That there was in the year 1661 two Millions of *People* more than *Anno* 1625 before the great *Plague*. I must confess, that, until this provocation, I had been frighted, with that mis-understood Example of *David*, from attempting any computation of the *People* of this populous place; but hereupon I both examined the lawfulness of making such Enquiries, and, being satisfied thereof, went about the work it self in this manner: *viz.*

2. First, I imagined, That, if the Conjecture of the worthy Person afore-mentioned had any truth in it, there must needs be about six or seven Millions of *People* in *London* now;



now ; but, repairing to my Bills, I found, that not above 15000 *per Annum* were buried ; and consequently, that not above one in four hundred must die *per Annum*, if the Total were but six Millions.

3. Next considering, That it is esteemed an even lay, whether any man lives ten years longer, I supposed it was the same, that one of any ten might die within one year. But when I considered, that of the 15000 aforementioned about 5000 were *Abortive* and *Still-born*, or died of *Teeth*, *Convulsion*, *Rickets*, or as *Infants*, and *Chrysome*s, and *Aged* ; I concluded, that of Men and Women, between ten and sixty, there scarce died 10000 *per Annum* in *London*, which number being multiplied by 10, there must be but 10000 in all, that is not the  $\frac{1}{60}$  part of what the *Alderman* imagined. These were but sudden thoughts on both sides, and both far from truth, I thereupon endeavoured to get a little nearer, thus : *viz.*

4. I considered, that the number of *Child-bearing Women* might be about double to the *Births* : forasmuch as such Women, one with another, have scarce more than one Child in two years. The number of *Births* I found, by those years wherein the *Registries* were well kept, to have been somewhat less than

the *Burials*. The *Burials* in these late years at a *Medium* are about 13000, and consequently the *Christenings* not above 12000. I therefore esteemed the number of *Teeming-Women* to be 24000: then I imagined, that there might be twice as many Families, as of such Women; for that there might be twice as many Women *Aged* between 16 and 76, as between 16 and 40, or between 20 and 44; and that there were about eight Persons in a Family, one with another, *viz.* the Man and his Wife, three Children and three Servants or Lodgers: now 8 times 48000 makes 384000-

5. Secondly, I find, by telling the number of Families in some Parishes within the Walls, that 3 out of 11 Families *per annum* have died: wherefore, 13000 having died in the whole, it should follow, there were 48000 Families according to the last-mentioned Account.

6. Thirdly, the Account, which I made of the *Trained-Bands* and *Auxiliary-Souldiers* doth enough justify this Account.

7. And lastly, I took the Map of *London* set out in the year 1658 by *Richard Newcourt*, drawn by a Scale of Yards. Now I guessed that in 100 Yards square there might be about 54 Families, supposing every House

to be 20 Foot in the front : for on two sides of the said square there will be 100 Yards of Housing in each, and in the two other sides 80 each ; in all 360 Yards : that is, 54 Families in each square, of which there are 220 within the Walls, making in all 11880 Families within the Walls. But forasmuch as there die within the Walls about 3200 *per Annum*, and in the whole 13000 ; it follows, that the Housing within the Walls is  $\frac{1}{4}$  part of the whole, and consequently, that there are 47520 Families in and about *London*, which agrees well enough with all my former computations : the worst whereof doth sufficiently demonstrate, that there are two Millions of People in *London*, which nevertheless most men do believe, as they do, that there be three Women for one Man, whereas there are fourteen Men for thirteen Women, as elsewhere hath been said.

8. We have (though perhaps too much at Random) determined the number of the Inhabitants of *London* to be about 384000 : the which being granted, we assert, that 199112 are *Males*, and 184886 *Females*.

9. Whereas we have found, that of 100 quick Conceptions about 36 of them die before they be six years old, and that perhaps but one surviveth 76 ; we having seven *De-*

*cads* between six and 76, we sought six mean proportional numbers between 64, the remainder, living at six years, and the one, which survives 76, and find, that the numbers following are practically near enough to the truth; for men do not die in exact Proportions, nor in Fractions, from whence arises this Table following.

*Viz.* Of an hundred there die within the first six years 386

The next ten years, or *Decad* 24

The second *Decad* 15

The third *Decad* 9

The fourth 6

The next 4

The next 3

The next 2

The next 1

10. From whence it follows, that of the said 100 conceived, there remain alive at six years end 64.

At sixteen years end 40

At twenty six 25

At thirty six 16

At forty six 10

At fifty six 6

At sixty 3

At seventy six 1

At eighty 0

11. It follows also, That of all which have been conceived, there are now alive 40 *per Cent.* above sixteen years old, 25 above twenty six years old, & *sic deinceps*, as in the above-Table. There are therefore of Aged between 16 and 56 the number of 40, less by six, *viz.* 34; of between 26 and 66 the number of 25, less by three, *viz.* 22: & *sic deinceps*.

Wherefore, supposing there be 199112 *Males*, and the number between 16 and 56 being 34; it follows, there are 34 *per Cent.* of all those *Males* fighting Men in *London*, that is 67694, *viz.* near 70000; the truth whereof I leave to examination, only the  $\frac{1}{5}$  of 67694, *viz.* 13539, is to be added for *Westminster, Stepney, Lambeth*, and the other distant Parishes; making in all 81233 fighting Men.

12. The next enquiry will be, In how long time the City of *London* shall, by the ordinary proportion of Breeding and dying, double its breeding People? I answer, In about seven years, and (*Plagues* considered) eight. Wherefore, since there be 24000 pair of Breeders, that is  $\frac{1}{8}$  of the whole, it follows, that in eight times eight years the whole People of the City shall double, without the access of Forreiners: the which contradicts not

our Account of its growing from two to five in 56 years with such accessles.

13. According to this proportion, one couple, *viz.* *Adam* and *Eve*, doubling themselves every 64 years of the 5610 years, which is the *Age* of the World according to the *Scriptures*, shall produce far more People than are now in it. Wherefore the World is not above 100 thousand years older, as some vainly imagine, nor above what the *Scripture* makes it.

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## C H A P. XII.

### *Of the Country-Bills.*

**W**E have, for the present, done with our Observations upon the Accounts of *Burials* and *Christenings* in and about *London*; we shall next present the Accounts of both *Burials*, *Christenings*, and also of *Weddings* in the Country, having to that purpose inserted Tables of 90 years for a certain Parish in *Hantshire*, being a place neither famous for *Longevity* and *Healthfulness*, nor for the contrary. Upon which Tables we observe,

1. That



1. That every *Wedding*, one with another, produces four Children, and consequently that that is the proportion of Children which any Marriageable Man or Woman may be presumed shall have. For, though a man may be Married more than once, yet, being once Married, he may die without any Issue at all.

2. That in this Parish there were born 15 *Females* for 16 *Males*, whereas in *London* there were 13 for 14, which shews, that *London* is somewhat more apt to produce *Males* than the Country. And it is possible, that in some other places there are more *Females* born than *Males*: which, upon this variation of proportion, I again recommend to the examination of the curious.

3. That in the said whole 90 years the *Burials* of the *Males* and *Females* were exactly equal, and that in several *Decads* they differed not  $\frac{1}{100}$  part; That in one of the two *Decads*, wherein the difference was very notorious, there were Buried of *Males* 337, and of *Females* but 284, viz. 53 difference, and in the other there died contrariwise 338 *Males*, and 386 *Females*, differing 46.

4. There are also *Decads*, where the Birth of *Males* and *Females* differ very much, viz. about 60.

5. That in the said 90 years there have been born more than buried in the said Parish (the which, both 90 years ago, and also now, consisted of about 2700 Souls ) but 1059 , *viz.* not 12 *per Annum*, one year with another.

6. That these 1059 have in all probability contributed to the increase of *London*; since, as was said even now, it neither appears by the *Burials*, *Christenings*, or by the built of new-housing, that the said Parish is more populous now, than 90 years ago, by above two or 300 Souls. Now, if all other places send about  $\frac{1}{3}$  of their increase, *viz.* about one out of 900 of their Inhabitants *Annually* to *London*, and that there be 14 times as many People in *England* as there be in *London* (for which we have given some Reasons ) then *London* increases by such *Advenæ* every year above 6000 : the which will make the Account of *Burials* to swell about 200 *per Annum*, and will answer the increases we observe. It is clear, that the said Parish is increased about 300, and it is probable that three or four hundred more went to *London*; and it is known, That about 400 went to *New-England*, the *Caribe-Islands*, and *New-found-Land*, within these last forty years.

7. According to the *Medium* of the said whole 90 years, there have been five *Christenings* for four *Burials*, although in some single *Years* and *Decads* there have been three to two, although sometimes (though more rarely) the *Burials* have exceeded the *Births*, as in the case of *Epidemical* Diseases.

8. Our former Observation, That healthful years are also the most fruitful, is much confirmed by our Country Accounts ; for, 70 being our Standard for *Births*, and 58 for *Burials*, you shall find, that where fewer than 58 died, more than 70 were born. Having given you a few instances thereof, I shall remit you to the Tables for the general proof of this Assertion : *Viz.* Anno 1633, when 103 were born, there died but 29. Now, in none of the whole 90 years, more were born than 103, and but in one fewer than 29 died, *viz.* 28 Anno 1658. Again Anno 1568, when 93 were born, but 42 died. Anno 1584, when 90 were born, but 41 died. Anno 1650, when 86 were born, but 52 died. So that by how much more are born, by so much (as it were) the fewer die. For when 103 were born, but 29 died : but when but 86 were born, then 52 died.

On the other side, Anno 1638, when 156 died *per Annum*, which was the greatest year  
of

of *Mortality*, then less than the meer Standard 70, *viz.* but 66, were born. Again *Anno* 1644, when 137 died, but 59 were born. *Anno* 1597, when 117 died, but 48 were born. And *Anno* 1583, when 87 died, but 59 were born.

A little Irregularity may be found herein, as that *Anno* 1612, when 116 died (*viz.* a number double to our Standard 58, yet) 87 (*viz.* 17 above the Standard 70) were born. And that when 89 died, 75 were born: but these differences are not so great, nor so often, as to evert our Rule, which, besides the Authority of these Accounts, is probable in it self.

9. Of all the said 90 years the year 1638 was the most *Mortal*; I therefore enquired, whether the *Plague* was then in that Parish, and having good satisfaction that it was not, (which I the rather believe, because that the *Plague* was not then considerable at *London*) but that it was a Malignant *Fever*, raging so fiercely about *Harvest*, that there appeared scarce hands enough to take in the Corn: which argues, considering there were 2700 Parishioners, that seven might be sick for one that died: whereas of the *Plague* more die than recover. Lastly, these People lay longer sick than is usual in the *Plague*, nor was there any mention of *Sores*, *Swellings*, *Eleme-*  
*Tokens,*

*Tokens*, &c. among them. It follows, that the proportion between the *greatest* and the *least Mortalities* in the Country are far greater than at *London*: Forasmuch as the greatest 156 is above *quintuple* unto 28 the least, whereas in *London* (the *Plague* excepted, as here it hath been) the number of Burials upon other Accounts within no *Decad* of years hath been double, whereas in the Country it hath been *quintuple*, not only within the whole ninety years, but also within the same *Decad*: for *Anno* 1633 there died but 29, and *Anno* 1638 the above-mentioned number of 156. Moreover, as in *London*, in no *Decad*, the Burials of one year are double to those of another: so in the Country they are seldom not more than so; as by this Table appears.

<i>Decad</i>	<i>greatest</i>	<i>least</i>
	<i>number of Burials</i>	
1	66	34
2	87	39
3	117	38
4	53	30
5	116	51
6	89	50
7	156	35
8	137	46
9	80	28
		Which

Which shews, that the opener and freer *Airs* are most subject both to the good and bad Impressions, and that the *Fumes, Steams* and *Stenches* of *London* do so medicate and impregnate the *Air* about it, that it becomes capable of little more, as if the said *Fumes* rising out of *London* met with, opposed and justied backwards the Influences falling from above, or resisted the Incurfion of the Country-*Airs*.

10. In the last *Paragraph* we said, that the Burials in the Country were sometime *quintuple* to one another, but of the Christenings we affirm, that within the same *Decad* they are seldom double, as appears by this Table, *viz.*

<i>Decad</i>	greatest number of Births	least
1	70	50
2	90	45
3	71	52
4	93	60
5	87	61
6	85	63
7	103	66
8	87	62
9	86	52
		Now



Now , although the disproportions of Births be not so great as that of *Burials*, yet these disproportions are far greater than at *London* : for let it be shewn in any of the *London Bills*, that within two years the *Christenings* have decreased  $\frac{1}{2}$ , or increased double, as they did *Anno* 1584, when 90 were born, and *Anno* 1586, wherein were but 45 : or to rise from 52, as *Anno* 1593, to 71, as in the next year 1594. Now these disproportions both in Births and Burials confirm what hath been before asserted, That *Healthfulness* and *Fruitfulness* go together, as they would not, were there not disproportions in both, although proportional.

11. By the Standard of Burials in this Parish I thought to have computed the number of Inhabitants in it, *viz.* by multiplying 58 by 4, which made the *Product* 232, the number of Families. Hereupon I wondred , that a Parish containing a large Market-Town, and 12 Miles compass, should have but 232 Houses ; I then multiplyed 232 by 8, the *Product* whereof was 1856, thereby hoping to have had the number of the Inhabitants, as I had for *London* : but when upon enquiry, I found there had been 2100 Communicants in that Parish, in the time of a *Minister* who forced too many into that Ordinance, and that

that 1500 was the ordinary number of Communicants in all times; I found also, that forasmuch as there were near as many under 16 years old, as there are above, *viz.* Communicants, I concluded, that there must be about 2700 or 2800 Souls in that Parish: from whence it follows, that little more than one of 50 dies in the Country, whereas in *London* it seems manifest, that about one in 32 dies, over and above what dies of the *Plague*.

12. It follows therefore from hence, what I more faintly asserted in the former Chapter, That the Country is more *healthful* than the City; that is to say, although men die more regularly, and less *per saltum* in *London*, than in the Country, yet, upon the whole matter, there die fewer *per rata*; so as the Fumes, Steams, and Stenches above-mentioned, although they make the Air of *London* more equal, yet not more *Healthful*.

13. When I consider, That in the Country seventy are Born for fifty eight Buried, and that before the year 1600 the like happened in *London*, I considered, whether a City, as it becomes more *populous*, doth not, for that very cause, become more *unhealthful*: and inclined to believe, that *London* now is more *unhealthful* than heretofore; partly for that  
it

it is more populous, but chiefly because I have heard, that sixty years ago few *Sea Coals* were burnt in *London*, which are now universally used. For I have heard, that *Newcastle* is more *unhealthful* than other places, and that many People cannot at all endure the smoak of *London*, not only for its unpleasantness, but for the suffocations which it causes.

14. Suppose, that *Anno* 1569 there were 2400 Souls in that Parish, and that they increased by the *Births* 70, exceeding the *Burials* 58, it will follow, that the said 2400 cannot double under 200. Now, if *London* be less *healthful* than the Country, as certainly it is, the *Plague* being reckoned in, it follows, that *London* must be doubling it self by generation in much above 200: but if it hath increased from 2 to 5 in 54, as aforesaid, the same must be by reason of transplantation out of the Country.

## *The Conclusion.*

**I**T may be now asked, To what purpose tends all this laborious bustling and groping? To know,

1. The number of the People?
2. How many *Males* and *Females*?
3. How many Married and Single?
4. How many *Teeming* Women?
5. How many of every *Septenary*, or *Decad* of years in age?
6. How many *Fighting* Men?
7. How much *London* is, and by what steps it hath, increased?
8. In what time the Housing is replenished after a *Plague*?
9. What proportion die of each general and particular *Casualties*?
10. What Years are Fruitful and Mortal, and in what Spaces and Intervals they follow each other?
11. In what proportion Men neglect the Orders of the *Church*, and *Setts* have increased?

12. The disproportion of Parishes?

13. Why the *Burials* in *London* exceed the *Christenings*, when the contrary is visible in the Country?

To this I might answer in general, by saying, that those, who cannot apprehend the reason of these Enquiries, are unfit to trouble themselves to ask them.

2. I might answer by asking, Why so many have spent their times and Estates about the Art of making Gold? which, if it were much known, would only exalt Silver into the place which Gold now possesseth; and if it were known but to some one Person, the same single *Adeptus* could not, nay, durst not enjoy it, but must be either a Prisoner to some Prince, and Slave to some Voluptuary, or else skulk obscurely up and down for his privacy and concealment.

3. I might answer, That there is much pleasure in deducing so many abstruse and unexpected inferences out of these poor despised Bills of *Mortality*; and in building upon that ground, which hath lain waste these eighty years. And there is pleasure in doing something new, though never so little, without pestering the World with voluminous Transcriptions.

4. But I answer more seriously; by complaining, That whereas the Art of Governing, and the true *Politicks*, is how to preserve the Subject in *Peace* and *Plenty*; that men study only that part of it which teacheth how to supplant and over-reach one another; and how, not by fair out-running, but by tripping up each other's heels, to win the Prize;

Now, the Foundation or Elements of this honest harmless *Policy* is to understand the Land, and the hands of the Territory, to be governed according to all their intrinsick and accidental differences: As for example; It were good to know the *Geometrical* Content, Figure, and Situation of all the Lands of a *Kingdom*, especially according to its most natural, permanent, and conspicuous Bounds. It were good to know how much Hay an Acre of every sort of Meadow will bear; how many Cattel the same weight of each sort of Hay will feed and fatten; what quantity of Grain and other Commodities the same Acre will bear in one, three, or seven years, *communibus Annis*; unto what use each soil is most proper. All which particulars I call the intrinsick value: for there is also another value meerly accidental, or extrinsick, consisting of the Causes why a parcel of Land, lying



lying near a good Market ; may be worth double to another parcel, though but of the same intrinsic goodness ; which answers the Queries, why Lands in the *North of England* are worth but sixteen years purchase, and those of the *West* above eight and twenty. It is no less necessary to know how many People there be of each Sex , State , Age, Religion, Trade , Rank , or Degree , &c. by the knowledge whereof, Trade and Government may be made more certain and Regular ; for , if men knew the People , as aforesaid, they might know the consumption they would make, so as Trade might not be hoped for where it is impossible. As for instance, I have heard much complaint, that Trade is not set in some of the *South-western* and *North western* Parts of *Ireland*, there being so many excellent Harbours for that purpose ; whereas in several of those places I have also heard, that there are few other Inhabitants, but such as live *ex sponte creatis*, and are unfit Subjects of Trade, as neither employing others , nor working themselves.

Moreover, if all these things were clearly and truly known ( which I have but ghesed at ) it would appear, how small a part of the People work upon necessary Labours and

Callings, *viz.* how many Women and Children do just nothing, only learning to spend what others get ; how many are meer Voluptuaries, and as it were meer Gamesters by Trade ; how many live by puzzling poor people with unintelligible Notions in Divinity and Philosophy ; how many by perswading credulous, delicate, and litigious Persons, that their Bodies or Estates are out of Tune, and in danger ; how many by fighting as Soldiers ; how many by Ministries of Vice and Sin ; how many by Trades of meer Pleasure, or Ornaments ; and how many in a way of lazy attendance, &c. upon others : And on the other side, how few are employed in raising and working necessary Food and Covering ; and of the speculative men, how few do study *Nature* and *Things* ! The more ingenious not advancing much further than to write and speak wittily about these matters.

I conclude, That a clear knowledge of all these particulars, and many more, whereat I have shot but at rovers, is necessary, in order to good, certain, and easie Government, and even to balance Parties and Factions both in *Church* and *State*. But whether the knowledge thereof be necessary to many, or fit for others than the Sovereign and his chief Ministers, I leave to consideration.



A N

## APPENDIX.

**F**Orasmuch as a long and serious perusal of all the Bills of Mortality, which this great City hath afforded for almost fourscore years, hath advanced but the few Observations comprised in the fore-going Treatise; I hope very little will be expected from the few scattered Papers that have come to my hands since the publishing thereof, especially from one that hath learned from the *Royal Society*, how many Observations go to the making up of one *Theoreme*, which (like Oaks and other Trees fit for durable Building) must be of many years growth.

The Accounts which follow, I reckon but as Timber and Stones; and the best Inferences I can make, are but as hewing them to a Square: as for composing a beautiful and

firm Structure out of them, I leave it to the Architecture of the said *Society*, under whom I think it honour enough to work as a Labourer.

My first Observation shall be, That at *Dublin* the Number of Weekly Burials being about 20, and those of *London* about 300, as also the Number of People reckoned to be within the Limits of the Bills of Mortality at *London* to be 460000; it will follow, that the Number of Inhabitants of *Dublin* be about 30000, viz. about one fifteenth part of those in and about *London*, which agrees with that Number which I have heard the Books of Poll-Money, raised but little before the time of this Bill, have exhibited as the Number of Inhabitants of that City: So as although I do not think one single Weekly Bill is sufficient to ground such a Conclusion upon, yet I think that several yearly Bills are the best of the easie ways from which to collect the Number of the People.

Secondly, Although I take it for granted, that in *Dublin* there be more Born than Buried, because the same hath appeared to be so in *London* by the Bills of Mortality before the year 1641, when the Civil Wars began, and much more eminently in *Amsterdam*, as shall be hereafter shewn; yet there are but 14 set down as Christned; which shews, that the

the defect there is much the same as at *London*, whether the cause thereof be negligence in the Register, or non-conformity to Publick Order, or both, I leave to the curious. I believe the cause is also the same, forasmuch as I heard it to be a Maxim at *Dublin*, to follow, if not forerun, all that is, or as they understand will be, practised in *London*; and that in all particulars incident to humane affairs.

I have here inserted two other Country-Bills, the one of *Grainbrook* in *Kent*, the other of *Tiverton* in *Devonshire*, which with that of *Hantsire*, lying about the midway between them, give us a view of the most Easterly, Southerly, and Westerly parts of *England*: I have endeavoured to procure the like account from *Northumberland*, *Cheshire*, *Norfolk* and *Nottinghamshire*; Thereby to have a view of seven Counties most differently situated, from whence I am sorry to observe that my Southern friends have been hitherto more curious and diligent than those of the North. The full observation from these Bills is, that all these three Country Bills agree, that each Wedding produces four Children, which is likewise confirmed from the Bills of *Amsterdam*. Secondly, they all agree that there be more Males born than Females,



but in different proportions, for at *Granbrook* there be 20 Males for 19 Females, in *Hants*, 16 for 15, in *London* 14 for 13, and at *Tiverton*, 12 for 11. Thirdly, I have inserted the Bills themselves, to the end that whoever pleases may examin, by all three together, the Observations I raised from the *Hants* Bill alone; conceiving it will be more pleasure and satisfaction to do it themselves, than to receive it from another hand. Only I shall add, as a new Observation from them all, that in the years 1648 and 1649, being the time when the people of *England* did most resent the horrid Parricide of his late Sacred Majesty, that there were but nine weddings in that year in the same places, when there were ordinarily between 30 and 40 *per Annum*. and but 16, when there were ordinarily at other times between 50 and 60. And it may be also observed that something of this black murder appeared in the years 1643 and 1644, when the Civil war was at the highest, but the contrary in the years 1654, 1655, &c. to prevent the new way of Marriage then imposed upon the people.

I have also supplied the Tables from the three general Bills for the years 1662, 1663, and 1664, which you will find to justify the  
the



the former Observations. But most eminently that which I take to be of most concernment, namely, of the difference between the numbers of Males and Females.

In the former Observations I did endeavour to deduce the number of the Inhabitants about the City of *London*, from the Bills of Mortality, concluding them to be about 460000, and did likewise set forth by what steps the people of the said City have increased from two to five since the year 1600.

And particularly in what proportions the City increased in its several parts from time to time: I have now procured an Account of the Men, Women, and Children, which were *Anno* 1631. found within the Liberties of *London*, which are circumscribed by *Temple-Bar*, *Holborn-Bars*, *Smithfield-Bars*, *Shoreditch-Bars*, *White-chappel-Bars*, and to the *Tower* Liberties, and *Meal-market* in *Southwark*; by which Account I hope it will appear, that I computed too many rather than too few, although the most part of men have thought otherwise. Nor do I wonder at it, since I never observed more enormous mistakes in any matter than concerning the number of people, Ale-houses, Coaches, Ships, Sea-men, Water-men, and several other

other Tradesmen, &c. The proportions of all which I have always thought is necessary to be known, in order to an exact Symmetry of the several members of a Common-wealth. I say, that the whole number of Inhabitants exceeds not 460000.

1. The number of Men, Women, and Children, found in the City and Liberties 1631, was 130178.

2. The Liberties of the City of *London* consist of the 97 Parishes within the Walls, and of  $\frac{2}{3}$  of the 16 Parishes next without them, which estimate of mine, nevertheless, I leave to examination.

The Liberties of *London* from the year 1631 to the year 1661 increased from 8 to 11, as may appear by the Tables, and consequently the said 130000 found in the year 1631, were increased to 179000, in *Anno* 1661.

Lastly, the Liberties of *London* in the year 1661 were in proportion to the whole, as 4 to 9, and consequently if there were 179000 souls, in the said Liberties, there was not above 403000 in the whole number of Parishes then comprehended in the Bills of Mortality.

The substance of the *Amsterdam* Bills of Mortality is, *viz.*

1. That there died in the several years of the Plague, as followeth:

*Anno*

<i>Anno</i> 1622	4141
1623	5929
1624	11795
1625	6781
1626	4425
1627	3976
1628	4497
1636	17193
1655	16727
1663	9752
1664	24148

2. That there are eleven burying-places, besides the Hospital and Pest-house, 257 Streets and Lanes, with 43 Burgwalls and Grachts in that City.

3. That in seven years, beginning from the 15 of *August* 1617 to the same day 1624, there were Christned in the reformed Churches of *Amsterdam* 52537, and that there died in the same time 32532. So as there were 20005 more born than buried, besides those that were Christned in other Congregations. And in the same time were 16430 publisht Marriages.

4. That in the first week of *September* 1664 there died 1041, and in eighteen weeks before the Burials increased from 331 up to the said number of 1041, and

and in twelve weeks after decreased back to the like number of 330.

5. In *February* following there died but 118 a week, and the ordinary number of weekly Burials is about 100, so as *London* seems to be three times as big as *Amsterdam*.

6. I have likewise hapned on some other Accompts, relating to Mortalities of some great Cities of the World, of what Authority I know not, but as printed at *Amsterdam* 1664, viz. *Anno* 1619 there died in *Grand Cairo* in ten weeks 73500, without any visible diminution of the people.

7. *Anno* 1625 there died in *Leyden* 9597. *Anno* 1635 there died in the same City of *Leyden* from the 14 of *July*, to the 29 of *December* 14381, the greatest week of mortality being the latter end of *October* was 1452. This Plague in 15 weeks increased from 96, to the said number of 1452, and in ten weeks after decreased to 107. Answerable to the time of Increase and Decrease afore-mentioned in *Amsterdam*, *Anno* 1655, there died in 21 weeks from *July* to *November* 13287, the greatest week being *Septemb.* 25. when died 896.

8. At *Harlem* there died in the same year, in the months of *August*, *September*, *October* and *November* 5723.

9. *Anno*

9. *Anno 1637*, in *Constantinople* there died 1500 *per diem*, but how long this Plague lasted, appeareth not.

10. The same year died in *Prague* 20000 Christians, and 10000 Jews.

11. *Anno 1652* there died in *Cracovia* 17000 Christians, and 20000 Jews.

12. *Anno 1653* there died in *Dantzick* in the last week of *September* 640, and in *Cöningsburg* 490.

13. 1654 there died in *Copenhagen* for several weeks 700 *per week*.

14. *Anno 1655* there died at *Amsterdam* and *Leyden*, as above-mentioned; and at *Deventer* 70, 80, and 90 *per diem*.

15. At *Leeuwardeen* 56 *per diem*.

16. *Anno 1656* there was so sweeping a Plague at *Naples*, that there died of it at the latter end of *May* 1300, or 1400 *per diem*. The sixth of *June* there were 80000 sick, that the well were not able to help, or bury the dead; presently after there died 5000 in three days; in *August* it began to cease, after it had destroyed 300000 people.

17. The Town of *Scala* in *Italy* was quite dispeopled, and at *Minory* there scaped but 22. At *Rome* there died in the same year about 100 *per diem* for a great while together.

18. 1657 There died at *Genoa* in Midsummer week 1200, afterwards there died 1600 *per diem*; infomuch that in the beginning of *August* they burnt the dead Corps for want of hands to bury them, which great Mortality decreased to five or six *per diem* before *September* was out. The total sum of all that died was about 70000.

19. At *Bergen* in *Norway*, Anno 1618 the Plague is represented to have been very terrible, by saying that there died 50 or 60 *per diem*, and that the whole City was in tears, that the Coffin-makers refused to make Coffins, that parents carried their children, and children their parents to the grave. But forasmuch as it was not mentioned how populous this place was, nor for how many days the Mortality continued, I can make but little estimate of this Plague, by what is above related.

20. The general Observations arising from the above-mentioned particulars, are as followeth:

First, That Northern, as well as Southern Countries are infested with great Plagues; although in the Southern Countries they are more vehement, and do both begin and end more suddenly.

21. Secondly, from the year 1652 the  
Plague



Plague was at *Cracow*, 1653 at *Dantzick* and *Coningsburg*, 1654 at *Copenhagen*, 1655 at *Leyden* and *Amsterdam*, and other Towns in the *Netherlands*, 1656 at *Naples* and *Rome*, 1657 at *Genoa*; So as it well deserves enquiry, whether the Plague in all these places were a sickness of the same kind, and did successively perambulate the several Countries above-mentioned; or whether it were a several disease in each place.

22. Thirdly, that the Plague is longer in rising to its height, than in decreasing to the same pitch; and the proportion thereof, in such cases where it hath most plainly appeared, is about three to two; for at *Amsterdam* it was eighteen weeks rising, and twelve decreasing; and at *Leyden* fifteen upon the increase, and ten decreasing.

It may be further observed, that in the four several times of great Mortality, the height was not always in the same month; for *Anno* 1592 it was the second week in *August*, when there died 1550 of all diseases; in the year 1603 the height was the second week of *September*, when there died 3129 of all diseases; in 1625 the extremity was in the third week in *August*, when there died 5205. *Anno* 1636 the like extremity was in the first week of *October*, there then dying 4005 of all

all diseases. In this place I think fit to intimate, that considering the present increase of the City from *Anno* 1625 to this time, which is from eight to thirteen, that until the Burials exceed 8400 *per week*, the Mortality will not exceed that of 1625. Which God for ever avert.

It may be further observed, that the time of the Plagues continuance at the height was of several durations, for *Anno* 1592 it continued from the first week in *July* to the second of *September*, without increasing or decreasing above 100 in 1600; whereas in 1603 it remain'd but three weeks at the state, decreasing near  $\frac{1}{4}$  the next week after the height; *Anno* 1625 it remain'd not three weeks at a stay, increasing  $\frac{1}{12}$  part the next week before the height, and decreasing as much the next week after. *Anno* 1636 it stood five weeks without increasing or decreasing above  $\frac{1}{12}$  part afore-mentioned.

Concerning the disease of the Plague, *Anno* 1592 it increased to  $\frac{1}{16}$  of the greatest number that died in twenty weeks; *Anno* 1603, it did the same in eleven; *Anno* 1625, in nine weeks; *Anno* 1636, as it was not so fierce as in the other years, so it was of longer continuance, as hath been else-where noted.

The last thing I shall observe is, that in all the four great years of mortality above-mentioned, I do not find that any week the Plague increased to the double of the precedent week above five times.

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*Anno 1631. Ann.7. Caroli I.*

**T**HE number of Men, Women, and Children, in the several Wards of London, and Liberties: taken in *August 1631.* by special command from the Right Honourable the Lords of His Majesties Privy Council.

Algate Ward	04763
Bishopsgate	07788
Bassishaw	01006
Breadstreet	02568
Bridg-ward within	02392
Bridg-ward without	18660
Billingsgate	02597
Broadstreet	03503
Colemanstreet	02634
Cornhil	01439
Cripplegate without	06445
Cripplegate within	04231
Farrington without	20846
Farrington within	08770
Cordwainer	02238

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89880

I

Aldersgate

Aldersgate	03594
Limestreet	01107
Queenhith	03358
Vintry	02742
Tower-ward	04248
Dowgate	03516
Langbourn	03168
Portfoken-ward	05703
Cheap-ward	02500
Wallbrook	02069
Candleweek-ward	01696
Castle-Baynard	<u>04793</u>
	<u>38404</u>
Bartholomew the great	01388
Bartholomew the less	00506
	38404
	89880
	<u>130178</u>

# *The Table of Burials, and Christnings, in London.*

<i>Anno Dom.</i>	<i>97 Pari- shes.</i>	<i>16 Pari- shes.</i>	<i>Out- Pari- shes.</i>	<i>Buried in all</i>	<i>Besides of the Plague</i>	<i>Christ- ned</i>
1604	1518	2097	708	4323	896	5458
1605	2014	2974	960	5948	444	6504
1606	1941	2920	935	5796	2124	6614
1607	1879	2772	1019	5670	2352	6582
1608	2391	3218	1149	6758	2262	6845
1609	2494	3510	1441	7545	4240	6388
1610	2326	3791	1369	7486	1803	6785
1611	2152	3398	1166	6716	627	7014
	16715	24780	8747	50242	14752	52190
1612	2473	3843	1462	7778	64	6986
1613	2406	3679	1418	7503	16	6846
1614	2369	3504	1494	7367	22	7208
1615	2446	3791	1613	7850	37	7682
1616	2490	3876	1697	8063	9	7985
1617	2397	4109	1774	8280	6	7747
1618	2815	4715	2066	9596	18	7735
1619	2339	3857	1804	7999	9	8127
	19735	31374	13328	64436	171	60316
1620	2726	4819	2146	9691	21	7845
1621	2438	3759	1915	8112	11	8039
1622	2811	4217	2392	8943	16	7894
1623	3591	4721	2783	11095	17	7945
1624	3385	5919	2895	12199	11	8299
1625	5143	9819	3886	18848	35417	6983
1626	2150	3285	1965	7401	134	6701
1627	2325	3400	1988	7711	4	8408
	24569	39940	19970	84000	35631	62114

# The Table of Burials, and Christnings, in London.

Anno Dom.	97 Pari- shes.	16 Pari- shes.	Out- Pari- shes.	Buried in all	Besides of the Plague	Christ- ned
1628	2412	3311	2017	7740	3	8564
1629	2536	3992	2243	8771	0	9901
1630	2506	4201	2521	9237	1317	9315
1631	2459	3697	2132	8288	274	8524
1632	2704	4412	2411	9527	8	9584
1633	2378	3936	2078	8393	0	9997
1634	2937	4980	2982	10399	1	9855
1635	2742	4966	2943	10651	0	10034
	20694	33495	19327	73505	1603	75774
1636	2825	6924	3210	12959	10400	9522
1637	2288	4265	2128	8681	3082	9160
1638	3584	5926	3751	13261	363	10311
1639	2592	4344	2612	9548	314	10150
1640	2919	5156	3246	11321	1450	10850
1641	3248	5092	3427	11767	1375	10670
1642	3176	5245	3578	11999	1274	10370
1643	3395	5552	3269	12216	996	9410
	23987	42544	25221	91752	19244	80443
1644	2593	4274	2574	9441	1492	8104
1645	2524	4639	2445	9608	1871	7966
1646	2746	4872	2797	10415	2365	7163
1647	2672	4749	3041	10462	3597	7332
1648	2480	4288	2515	9283	611	6544
1649	2865	4714	2920	10499	67	5825
1650	2301	4138	2310	8749	15	5612
1651	2845	5002	2597	10804	23	6071
	21026	36676	21199	78896	10041	54617



# *The Table of Burials, and Christnings, in London.*

<i>Anno Dom.</i>	<i>97 Pari- shes.</i>	<i>16 Pari- shes.</i>	<i>Out- Pari- shes.</i>	<i>Buried in all</i>	<i>Besides of the Plague</i>	<i>Christ- ned</i>
1652	3293	5719	3546	12553	16	6128
1653	2527	4635	2919	10081	6	6155
1654	3323	6063	3845	13231	16	6620
1655	2781	5148	3439	11348	9	7004
1656	3327	6573	4015	13915	6	7050
1657	3014	5646	3770	12430	4	6685
1658	3613	1692	4443	14979	14	6170
1659	3431	6988	4301	14720	36	5690
	25288	47695	30278	103261	107	51502
1660	3098	5644	2926	12668	13	6971
1661	3804	7309	5532	16645	20	8855
1662	3123	6094	4423	13652	12	10019
1663	3001	5602	4129	12732	09	10292
1664	3448	7166	4829	15448	05	11722

The Table following contains the Number of *Burials* and *Christenings* in the seven *Parishes* hereafter mentioned, from the year 1636 unto the year 1659 *inclusive*; all which time the *Burials* and *Christenings* were jointly mentioned: the five last years the *Christenings* were omitted in the yearly *Bills*. This Table consists of seventeen Columns, the Total of all the *Burials* being contained in the sixteenth Column: which Number being added to the *Total* in the precedent Table of *Burials* and *Christenings*, makes the *Total* of every yearly or general Bill.

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Note,

Note, where there follows a second Number under any year, it denotes those which died that year of the Plague.

Anno Dom.	Westminster		Wilmington		Lambeth		Stepney		Newington		Hackney		Redriff		Total in the 7. Parishes	
	Bur.	Ch.	B.	C.	B.	Ch.	Bur.	Ch.	B.	C.	B.	C.	B.C.	B.C.	Bur.	Ch.
1636	1107	556	99	56	213	137	1895	881	584	155	68	77	90	62	4056	1924
	442		30		45		909		242		14		20		1702	
1637	963	496	94	72	173	137	952	838	183	172	68	70	74	51	2507	1836
	301		17		18		153		16		6		10		521	
1638	1021	563	116	49	221	140	1209	908	255	146	101	69	74	78	2997	1953
	126				8		11								145	
1639	546	543	88	53	195	132	970	956	187	159	84	53	81	52	2151	1948
	4		2				2						1		9	
1640	754	665	94	54	187	142	1106	983	189	194	76	54	53	77	2459	2155
	62		3		6		117						1		189	
1641	697	625	92	76	168	137	1250	1037	170	137	82	73	69	64	2508	2149
	40		5		9		70				4				128	
1642	671	630	98	71	149	124	1270	1158	160	145	78	58	63	76	2489	2262
	37		4		12		20		17		5		4		99	
1643	666	592	105	69	177	114	1167	1013	240	147	65	36	42	67	2471	2038
	25		3		45		83		86				2		244	
1644	570	429	61	55	115	105	1187	933	123	101	54	45	70	82	2189	1750
	35		8		8		269		44		3		17		384	
1645	621	444	58	63	146	114	1171	873	183	119	58	60	50	60	2284	1753
	62		6		3		150		18		7		1		256	
1646	691	505	84	61	137	108	1230	960	156	130	76	63	47	43	2421	1868
	76		8		5		97		14		9		2		203	
1647	739	464	108	56	161	94	1126	926	129	65	88	45	42	44	2393	1688
	114		12		25		155		28		16		4		434	
1648	561	384	68	46	87	57	837	767			57	42	45	59	1635	1305
	41		4				31				6				82	

Anno Dom.	Westminster		Islington		Lambeth		Stepney		Newington		Hackney		Redriff		Total in the 7 Parishes	
	B. Ch.		B. C.		B. Ch.		Bur. Ch.		B. Ch.		B. C.		B. C.		Bur. Ch.	
1649	558	333	90	44	131	55	83	86	25		90	49			1807	1106
			1				3								4	
1650	470	413	78	54	88	50	74	85	72	55	65	61	48	50	62	1550
1651	580	345	107	51	127	49	96	163	4	172	59	60	30	84	45	2091
1652	649	432	99	36	179	50	121	26	57	198	85	72	33	74	37	2483
					1										1	
1653	567	394	69	46	120	54	106	46	20	195	76	71	48	69	21	2155
1654	657	401	96	65	166	76	125	28	03	236	106	88	31	75	46	257
1655	676	414	95	86	134	128	119	98	59	172	120	68	37	62	57	2406
1656	761	498	139	89	176	152	125	59	63	248	127	67	46	66	45	2701
1657	705	473	112	67	231	137	121	38	76	204	123	96	42	51	31	2612
1658	890	440	113	36	220	32	148	68	92	181	99	91	30	48	16	2958
1659	822	415	116	56	193	103	139	26	95	138	86	83	50	84	13	2828
1660	783		108		183		115	1		114		65		33		2437
1661	983		102		330		156	1		340		102		87		3505
1662	848		59		210		153	1		76		101		77		2902
1663	793		41		199		124	1		188		73		80		2615
1664	807		50		236		139	2		235		80		40		2848

*The TABLE of Males, and Females,  
for LONDON.*

An.Dom.	Buried		Chriftened	
	Males	Females	Males	Females
1629	4668	4103	5218	4683
1630	5660	4894	4858	4457
1631	4549	4013	4422	4102
1632	4932	4603	4994	4590
1633	4369	4023	5158	4839
1634	5676	5224	5035	4820
1635	5548	5103	5106	4928
1636	12377	10982	4917	4605
	47739	43945	39708	37024
1637	6392	5371	4703	4457
1638	7168	6456	5359	4952
1639	5351	4511	5366	4784
1640	6761	6010	5518	5332
Total	73451	65293	60664	56549
1641	6872	6270	5470	5200
1642	7049	6224	5460	4910
1643	6842	6360	4793	4617
1644	5659	5274	4107	3997
1645	6014	5465	4047	3919
1646	6683	6097	3768	3395
1647	7313	6746	3796	3536
1648	5145	4749	3363	3181
	51577	47185	34804	32755

An.Dom.	Buried		Christened	
	Males	Females	Maes	Females
1649	5454	5112	3079	2746
1650	4548	4216	2890	2722
1651	5680	5147	3231	2840
1652	6543	6026	3220	2908
1653	5416	4671	3196	2959
1654	6972	6275	3441	3179
1655	6027	5330	3655	3349
1656	7365	6556	3668	3382
	44005	41333	26380	24085
1657	6572	5856	3396	3289
1658	7936	7057	3157	3013
1659	7451	7305	3209	2781
1660	7960	7158	3724	3247
1661	10448	9287	4748	4107
1662	8623	7931	5216	4803
1663	8035	7321	5411	4881
1664	9369	8928	6041	5681
	66400	60843	34902	31802
Total	235247	214658	156750	146231



*The Table of the Country-Parish.*

Years	Communi- cants	Wed- dings	Christned			Buried		
			M.	F.	Both	M.	F.	Both
1569		14	38	30	68	23	21	44
1570		19	29	32	61	21	25	46
1571		18	28	26	54	23	27	50
1572		23	32	32	64	20	14	34
1573		21	34	36	70	24	13	37
1574		16	21	29	50	28	38	66
1575		24	37	29	66	15	19	34
1576		22	33	37	70	16	18	34
1577		13	29	26	55	19	21	40
1578		20	31	35	66	25	25	50
		190	312	302	614	214	221	435

1579	15	35	36	71	27	27	54
80	21	43	31	74	38	41	79
81	29	29	33	62	34	24	58
82	22	28	29	57	18	21	39
83	22	32	27	59	35	52	87
84	15	46	44	90	22	19	41
85	15	26	21	47	15	27	42
36	18	22	23	45	24	37	61
87	13	34	31	65	43	36	79
1588	15	33	34	67	31	18	49
185		328	309	637	287	302	589

*The Table of the Country-Parish.*

Years	Commu- nicants	Wed- dings	Christned			Buried		
			M.	F.	Both	M.	F	Both
1589		20	31	27	58	28	16	44
90		16	40	29	69	36	21	57
91		12	37	28	65	35	30	65
92		14	40	25	65	28	19	47
93		20	32	20	52	33	32	65
94		24	34	37	71	16	22	38
95		16	32	28	60	33	28	61
96		9	36	26	62	42	29	71
97		23	23	25	48	53	64	117
98		21	37	29	66	33	23	66
1175 1342 1274 616 1337 1219 1631								

1599	19	45	31	76	21	22	46
600	16	26	34	60	20	26	30
601	16	39	32	71	18	12	47
602	14	31	32	63	29	18	71
603	12	31	38	69	32	39	53
604	21	42	35	77	26	27	33
605	19	47	34	81	21	12	51
606	19	29	41	70	28	23	52
607	27	36	47	83	33	19	42
608	17	40	53	93	21	21	
1181 1366 1377 1743 1249 1219 1468							

*The Table of the Country-Parish.*

Years	Weddings	Christned		Both	Buried		Both
		M.	F.		M.	F.	
1609	23	30	31	61	24	41	65
10	19	46	30	76	33	40	73
11	25	40	41	81	41	32	73
12	20	55	32	87	53	63	116
13	24	41	33	74	47	41	88
14	25	50	35	85	27	36	63
15	22	35	48	83	28	36	64
16	14	38	36	74	27	41	68
17	17	45	31	76	35	28	63
1618	8	37	41	78	23	28	51
197141713581775133813861724							
1619	21	37	43	80	25	28	54
20	20	34	51	85	18	30	48
21	21	31	37	68	28	36	64
22	23	45	38	83	20	26	46
23	14	40	36	76	56	31	87
24	19	30	33	63	29	35	64
25	7	37	41	78	30	20	50
26	9	30	35	65	21	29	50
27	18	45	23	68	24	29	53
1628	16	39	36	75	47	42	89
168136813731741130513061611							

*The Table of the Country-Parish.*

Years	Weddings	Christned		Both	Buried		Both
		M.	F.		M.	F.	
1629	22	53	38	91	46	28	74
30	8	58	45	103	26	27	53
31	20	42	29	71	26	33	59
32	16	43	50	93	15	21	36
33	12	38	65	103	18	11	29
34	23	30	45	75	18	26	44
35	11	39	32	71	18	17	35
36	15	50	37	87	42	48	90
37	13	35	36	71	25	35	60
1638	13	30	36	66	82	73	156
153   418   413   831   317   319   636							
1639	18	24	31	55	48	66	114
40	11	44	41	85	35	39	74
41	21	34	29	63	34	39	70
42	21	48	39	87	32	29	61
43	8	30	42	72	59	28	87
44	16	33	26	59	65	72	137
45	10	43	41	84	28	29	57
46	11	32	35	67	24	32	56
47	12	28	46	74	25	21	46
48	9	35	27	62	25	31	56
137   351   357   708   375   383   758							

*The Table of the Country-Parish.*

Years	Weddings	Christned			Buried		
		M.	F.	Both	M.	F.	Both
1649	9	22	37	59	46	34	80
50	9	55	31	86	25	27	52
51	7	25	27	52	11	21	32
52	14	34	28	62	20	25	45
53	9	47	24	71	21	14	35
54	15	34	37	71	14	25	39
55	38	35	34	69	28	19	47
56	28	40	30	70	18	15	33
57	37	23	43	66	22	25	47
58	16	39	29	68	13	15	28
182   354   320   674   218   220   438							

# The Table by *Decads* of years for the Country Parish.

Decads of Years	Married	<i>Christened</i>		Both	<i>Buried</i>		Both
		Males	Females		Males	Females	
15 { 69 78	190	312	302	614	214	221	435
15 { 79 88	185	328	309	637	287	302	589
15 { 89 98	175	342	274	616	337	284	621
16 { 99 608	181	366	377	743	249	219	468
16 { 09 18	197	417	358	775	338	386	724
16 { 19 28	168	368	373	741	305	306	611
16 { 29 38	153	418	413	831	317	319	636
16 { 39 48	137	351	357	708	375	383	758
16 { 49 58	182	354	320	674	218	220	438
1598 3256 3083 6339 2640 2640 5280							



*The number of the Weddings,  
Christnings and Burials that  
were in the Town and Parish  
of Tiverton, from March  
1560 to January 1664; as  
appeareth by the Registers.*

Years	Weddings	Christned			Buried		
		M.	F.	Both	M.	F.	Both
1560	37	23	29	52	43	28	71
61	51	35	31	66	36	34	70
62	16	59	50	109	32	34	66
63	19	39	50	89	27	15	42
64	19	47	50	97	21	15	36
65	14	51	27	78	26	28	54
66	19	67	44	111	23	12	35
67	23	52	42	94	28	16	44
68	15	50	34	84	25	25	50
69	19	40	37	77	23	38	61
232		463	394	857	284	245	529

*The Table of the Parish of Tiverton.*

Years	Weddings		Christned		Both	Buried		Both
	M.	F.	M.	F.		M.	F.	
1570	17	51	45	96	45	58	103	
71	21	46	26	72	70	68	138	
72	35	52	44	96	30	23	53	
73	38	55	39	94	22	19	41	
74	37	42	50	92	25	28	53	
75	32	51	71	122	33	21	54	
76	27	62	65	127	43	93	136	
77	27	79	46	125	54	76	130	
78	38	59	57	116	42	54	96	
79	45	56	59	115	35	63	98	
<hr/>								
	317	1552	1502	1055	1399	1503	1902	
<hr/>								
1580	35	61	63	124	36	43	79	
81	34	62	64	126	37	39	76	
82	34	68	67	135	45	38	83	
83	33	54	44	98	31	47	78	
84	28	77	59	136	39	43	82	
85	11	69	64	133	32	52	84	
86	27	42	40	82	49	40	89	
87	27	57	63	120	76	94	170	
88	36	67	65	132	57	43	100	
89	33	83	70	153	47	55	102	
<hr/>								
	298	1640	1599	1239	1449	1494	1943	

*The Table of the Parish of Tiverton.*

Years	Weddings	Christned			Buried			
		M.	F.	Both	M.	F.	Both	
1590		39	60	64	124	62	87	149
91	11	48	56	44	100	268	282	550
92	25	43	75	77	152	37	48	85
93	0	43	63	48	111	37	65	102
94	1	37	66	98	164	31	47	78
95	12	38	54	52	106	37	60	97
96	27	22	60	58	118	51	77	128
97	72	18	37	29	65	124	153	277
98	44	23	44	38	82	45	103	148
99	52	42	50	73	123	27	27	54
		353	565	521	1146	719	949	1668
1600		38	64	54	118	28	38	66
1	22	33	52	82	134	28	36	64
2	12	37	65	62	127	41	42	83
3	1	52	60	83	143	50	36	86
4	20	28	75	63	138	27	63	90
5	1	49	62	68	130	33	48	81
6	20	37	79	77	156	45	42	87
7	12	47	89	77	166	34	52	86
8	0	37	60	86	146	51	64	115
9	0	34	70	69	139	27	49	76
		392	676	721	1379	364	470	834

Years	Weddings		Christned		Both	Buried		Both
	M.	F.	M.	F.		M.	F.	

*The Table of the Parish of Tiverton.*

1610	31	83	88	171	62	50	112
11	51	83	96	179	39	41	80
12	47	79	70	149	58	45	103
13	38	74	77	151	39	40	79
14	46	90	88	178	42	41	83
15	55	88	84	172	39	44	83
16	24	111	100	211	53	59	112
17	41	99	79	178	57	57	114
18	46	102	79	181	32	44	76
19	30	104	102	206	65	72	137

1 409 | 913 | 863 | 1776 | 486 | 493 | 979

1620	42	105	72	177	53	53	106
21	74	111	111	222	61	51	112
22	40	89	104	193	60	86	146
23	52	108	88	196	80	101	181
24	52	95	95	190	60	68	128
25	57	131	117	248	86	61	147
26	66	97	101	198	73	95	168
27	67	143	110	253	98	45	143
28	66	103	114	217	87	98	185
29	77	124	108	232	62	68	130

1 593 | 1106 | 1020 | 2126 | 720 | 726 | 1446

*The Table of the Parish of Tiverton.*

Years	Weddings	Christned			Buried			
		M.	F.	Both	M.	F.	Both	
1630	73	117	123	240	104	74	178	
31	40	118	100	218	85	92	177	
32	63	106	104	210	84	83	167	
33	63	114	121	235	75	71	146	
34	54	114	95	209	73	91	164	
35	82	124	111	235	84	92	176	
36	43	135	113	248	85	87	172	
37	42	110	98	208	106	142	248	
38	62	112	112	224	194	170	364	
39	62	119	106	225	115	137	252	
I		584	1169	1083	2252	1005	1039	2044

1640	66	124	114	238	82	104	186
41	52	122	114	236	83	88	171
42	59	102	136	238	110	128	238
43	54	115	117	232	102	88	190
44	22	76	78	154	232	213	445
45	47	95	175	270	99	92	191
46	41	61	50	111	3	3	6 Pl.
47	23	116	106	222	7	3	10
48	22	85	67	152	24	17	41
49	16	96	92	188	21	30	51
I	402	991	1049	2041	763	766	1529

*The Table of the Parish of Tiverton.*

Years	Weddings	Christned			Buried		
		M.	F.	Both	M.	F.	Both
1650	9	66	79	145	7	9	16
51	9	50	63	113	5	10	15
52	9	80	73	153	48	51	99
53	21	89	219	208	47	78	125
54	108	105	104	206	72	68	140
55	140	87	104	191	87	114	201
56	109	107	90	197	56	86	142
57	102	94	101	195	57	59	126
58	60	70	83	153	77	85	162
59	37	77	78	155	72	80	152
I		604	825	891	1716	1538	1640
1660	27	61	68	129	70	69	139
1	38	83	93	176	73	85	158
2	35	73	56	129	91	95	186
3	35	68	64	132	72	74	146
4	41	68	72	140	98	114	212
I		177	1353	1353	1706	1404	1437



*The number of the Weddings, Christnings and Burials that were in the Parish of Cranbrooke, from March 26. 1560 to March 24. 1649; (as appeareth by the Register) only in the years 1574 and 1575 the Christnings are wholly omitted, because the Register is very imperfect for the greater part of those years.*

Years	Weddings	Christned			Buried		
		M.	F.	Both	M.	F.	Both
1560	20	36	33	69	29	21	50
61	24	46	33	79	23	22	45
62	23	32	26	58	40	31	71
63	15	28	21	49	19	24	43
64	23	29	29	58	10	8	18
65	29	44	29	73	37	34	71
66	25	39	26	65	69	35	104
67	28	42	41	83	36	21	56
68	22	38	44	82	31	31	62
69	22	36	35	71	25	19	44
I		231	1370	1317	1687	1319	1246
				1565			

*The Table of the Parish of Cranbrook.*

Years	Wedding	Christned			Buried		
		M.	F.	Both	M.	F.	Both
1570 ✓	18	30	44	74	26	36	62
71	21	31	27	58	31	16	47
72	25	35	34	69	24	39	63
73	29	28	25	53	29	21	50
74	23				28	28	56
75	25				18	14	32
76	29	49	42	91	17	16	33
77 ✓	16	36	48	84	23	21	44
78	24	42	39	81	19	16	35
79	21	47	44	91	26	18	44
235		298	303	601	241	225	466
1580	30	47	42	89	26	23	49 Pl.
81	28	61	46	107	32	30	62 18
82	26	58	49	117	52	37	89 41
83	24	59	44	103	24	20	44 22
84 ✓	25	53	55	108	24	29	53
85	22	60	52	112	16	14	30
86	17	53	50	103	28	22	50
87 ✓	20	45	53	98	28	24	52
88 ✓	24	57	59	116	24	21	45
89	19	59	44	103	17	28	45
235		552	504	1051	271	248	519

*The Table of the Parish of Cranbrook.*

Years	Weddings	Christned			Buried		
		M.	F.	Both	M.	F.	Both
1590	25	64	58	116	21	17	38
91 ✓	26	41	52	93	34	43	77
92	20	59	46	105	39	31	70
93	23	54	47	101	22	17	39
94	22	48	37	85	24	23	47
95	14	55	53	108	35	36	71
96 ✓	17	36	42	78	42	25	67 pl.
97	22	37	19	56	112	110	222 181
98	22	47	41	88	27	34	59 pl.8
99	30	56	40	96	19	20	39
221   497   429   926   373   246   729							
1600	16	48	44	92	16	18	34
1	19	44	41	85	19	29	48
2	26	50	43	93	28	26	54
3	22	68	51	119	36	28	64 pl.9
4 ✓	36	47	61	108	20	24	44
5	23	56	39	95	38	30	68
6 ✓	23	42	44	86	30	31	61 pl.1
7 ✓	29	51	65	116	48	30	78
8	13	56	35	91	33	31	64
9	16	40	37	77	43	46	89 pl.1
223   502   460   962   311   292   603							

*The Table of the Parish of Cranbrook.*

Years	Weddings	Christned			Buried			
		M.	F.	Both	M.	F.	Both	
1610		26	45	42	87	32	42	74
11	✓	27	39	44	83	44	53	97
12		16	44	39	83	50	43	93
13		22	43	41	84	46	50	96
14		22	50	44	94	55	35	90
15		35	56	44	100	64	61	125
16	✓	29	35	54	89	40	47	87
17	✓	20	49	52	101	50	48	98
18	✓	32	38	51	89	37	58	95
19		32	47	40	87	50	44	94
I		261	446	451	897	468	481	949
<hr/>								
1620	✓	27	59	61	120	45	52	97
21		26	54	50	104	40	46	86
22	✓	14	61	65	126	27	28	55
23	✓	18	37	37	74	33	34	67
24	✓	45	59	60	119	44	31	75
25	✓	22	44	59	103	54	56	110
26	✓	26	36	45	81	48	49	97
27	✓	25	45	50	95	36	38	74
28	✓	38	57	60	117	56	70	126
29		48	60	58	118	51	44	95
I		289	512	545	1057	434	448	882

*The Table of the Parish of Cranbrook.*

Years	Weddings	Christened			Buried			
		M.	F.	Both	M.	F.	Both	
1630	✓ 25	58	64	122	41	52	93	
31	15	51	46	97	46	42	88	
32	20	57	56	113	56	52	108	
33	19	73	55	128	44	44	88	
34	30	63	52	115	46	51	97	
35	✓ 18	54	57	111	56	50	106	
36	✓ 15	52	55	107	39	60	99	
37	✓ 31	61	85	126	47	49	96	
38	✓ 22	49	56	105	73	80	153	
39	28	31	36	67	63	51	114	
I		223	549	542	1019	511	531	1042

1640	30	65	50	115	70	54	124
1	20	51	62	113	51	36	87
2	27	47	40	87	39	53	92
3	20	68	63	131	68	59	117
4	23	51	60	111	37	49	86
5	31	55	46	101	30	46	76
6	14	63	51	114	69	65	134
7	18	44	36	83	72	47	119
8	6	35	23	58	55	60	115
9	7	37	26	63	58	48	106
I	196	516	460	976	549	517	1066

*Dublin, A Bill of Mortality*  
 from the 26 of *July* to the 2d of  
*August* 1662.

	Baptiz.	Plague	Spot.Fea.	Smal Pox	Consum.	Fever	Aged	Rickets	Flux
<i>Saint Michans</i>	1	1					1		
<i>S.Katharines &amp; S. James</i>	2								1
<i>S. Andæns</i>					1				
<i>S. Michaels</i>	2				2				2
<i>S. Johns</i>							2		2
<i>S. Nicholas without</i>	5				1		1		1
<i>S. Nicholas within</i>	1								1
<i>S. Warbrows &amp; S. Andrews</i>	2				1				
<i>S. Keavans</i>					1				
<i>S. Brides</i>	1				2				

The Total Baptized 14. Total Buried 20.

*Jacob Thring, Reg.*

Some





Some further

# OBSERVATIONS

O F

*Major John Graunt.*

**W**Hereas in the Month of *December*, in the Year 1672, there were Christen'd in the several Parishes of the City and Suburbs of *Paris* 1366, and Weddings 68, and Buried 1153, yet of the Reformed Religion, in the same space of Time and Place, there were Christen'd but 27, and Buried but 14. At a medium being compared to the gross sum, the Protestants in *Paris* are but as one to 65.

A further Observation may be made; That whereas in the whole Year of 1672, there were Buried 17584, and the Christenings then were 18427, which difference  
between

between Christening and Burials was very agreeable with the difference formerly in the City of *London*, before Phanaticism and the Anabaptists were known in those Parts: But in the same Year of 1672 in the City of *London* and Places adjacent, the Burials were 18230, and the Christenings but 12563. By which it plainly appears that  $\frac{1}{3}$  of the Inhabitants of the Places aforesaid, are such as do not conform to the Doctrine and Discipline of the Church of *England*.

As concerning the common Question, Whether *Paris* or *London* hath most Inhabitants, my Answer must be fram'd after this manner, upon some Observations made upon the numbers of Burials of each City.

I find that in the City and Suburbs of *Paris* in the Years 1670, 1671, and 1672, the total number of the Burials was 56443; and in the Years aforesaid in the City of *London*, Suburbs, and Places adjacent (as appears by the Annual Bills of Mortality) was Buried 54157.

But since that *Hackney*, *Lambeth*, *Newington*, *Islington*, *Rotherhit*, *Stepney* and *Westminster*, although put into the Bills of Mortality, they cannot properly be reckon'd as parts of the City of *London* (*Westminster* being a distinct City of it self, and the others above

above-named Country Villages ) and there having been Buried in the Places last named in the three Years aforesaid (as appears by the said Annual Bills) 10000, which being deducted out of the number aforesaid, the remaining number is 44157, upon which I think the Comparison must be made.

By which it appears that *Paris* hath exceeded the City of *London* in the number of Burials 12286, which number is between a fourth and a fifth of the said number of 56443, which is the Proportion of the difference in the number of Inhabitants; the City of *Paris* having more than a fifth, and yet not a fourth more than the City of *London*.

# *Christenings, Marriages, and Burials in the City of Pa- ris, 1670.*

	Christenings.	Marriages.	Burials.
<i>January.</i>	1596	353	2350
<i>February.</i>	1712	589	2159
<i>March.</i>	1661	048	2033
<i>April.</i>	1351	267	1882
<i>May.</i>	1342	374	1714
<i>June.</i>	1222	354	1644
<i>July.</i>	1348	420	1540
<i>August.</i>	1420	314	2162
<i>September.</i>	1408	343	1845
<i>October.</i>	1312	313	1502
<i>November.</i>	1324	479	1290
<i>December.</i>	1120	076	1340
<b>Total</b>	<b>16810</b>	<b>3930</b>	<b>21461</b>

*Christenings,*

*Christenings, Marriages, and  
Burials in the City of Pa-  
ris, 1671.*

	Christenings.	Marriages.	Burials.
<i>January.</i>	1675	548	1150
<i>February.</i>	1656	489	1068
<i>March.</i>	1860	56	1218
<i>April.</i>	1595	447	1350
<i>May.</i>	1478	324	1431
<i>June.</i>	1331	334	1219
<i>July.</i>	1424	337	1358
<i>August.</i>	1606	324	1502
<i>September.</i>	1507	327	1897
<i>October.</i>	1587	321	1753
<i>November.</i>	1560	437	2709
<i>December.</i>	1253	42	1743
<b>Total</b>	<b>18532</b>	<b>3986</b>	<b>17398</b>

(146)

*Christenings, Marriages, and  
Burials in the City of Pa-  
ris, 1672.*

	Christenings.	Marriages.	Burials.
<i>January.</i>	1837	325	1930
<i>February.</i>	1920	625	1554
<i>March.</i>	1636	108	2008
<i>April.</i>	1572	130	1664
<i>May.</i>	1528	332	1551
<i>June.</i>	1359	349	1602
<i>July.</i>	1414	334	1323
<i>August.</i>	1498	271	1407
<i>September.</i>	1379	278	1216
<i>October.</i>	1481	309	1119
<i>November.</i>	1437	433	1057
<i>December.</i>	1366	068	1153
<i>Total</i>	18427	3562	17584





**A Table shewing how many died weekly, as well of all Diseases, as of the Plague, in the Years 1592, 1603, 1625, 1630, 1636; and this present Year 1665.**

Buried of all Diseases in the Year 1592.			Buried of all Diseases in the Year 1603.			Buried of all Diseases in the Year 1625.			Buried of all Diseases in the Year 1630.			Buried of all Diseases in the Year 1636.			Buried of all Diseases in the Year 1665.			
	Total	Pla.		Total	Plag.		Total	Plag.		Total	Pl.		Total	Pla.		Total	Plag.	
March 17	230	3	March 17	108	3	March 17	262	4	June 24	205	19	April 7	119	2	December 27	291		
March 24	351	31	March 24	60	2	March 24	226	8	July 1	209	25	14	205	4	January 3	349		
March 31	219	29	March 31	78	6	March 31	243	11	8	217	43	This Week these Parishes were added: S. Marg. VVestminster, Lambeth Parish, S. Mary Newington, Redriff Parish, S. Mary Ilington, Stepney and Hackney Parishes.			10	394		
April 7	307	27	April 7	66	4	April 7	239	10	15	230	50				17	415		
April 14	203	33	April 14	79	4	April 14	256	24	22	229	40				24	474		
April 21	290	37	April 21	98	8	April 21	230	25	29	279	77				31	409		
April 28	310	41	April 28	109	10	April 28	305	26	August 5	250	56				February 7	393		
May 5	350	29	May 5	90	11	May 5	292	30	12	246	65				14	461		
May 12	339	38	May 12	112	18	May 12	232	45	19	269	54	April 21	285	14	21	393		
May 19	300	42	May 19	122	22	May 19	379	71	26	270	67	28	259	17	28	396		
May 26	450	58	May 26	122	32	May 26	401	78	September 2	230	66	May 5	251	10	March 7	441		
June 2	410	62	June 2	114	30	June 2	395	69	9	259	63	12	308	55	14	433		
June 9	441	81	June 9	131	43	June 9	434	91	16	264	68	19	299	35	21	365		
June 16	399	99	June 16	144	59	June 16	510	161	23	274	57	26	330	62	28	353		
June 23	401	108	June 23	182	72	June 23	640	239	30	269	56	June 2	339	77	April 4	344		
June 30	850	118	June 30	267	158	June 30	942	390	October 7	236	66	9	345	87	11	382		
July 7	1440	927	July 7	445	265	July 7	1222	593	14	261	73	16	381	103	18	344		
July 14	1510	93	July 14	612	424	July 14	1781	1004	21	248	60	23	304	79	25	390	2	
July 21	1491	258	The Out-Parishes this Week were joined with the City.			July 21	2850	1819	28	214	34	30	352	104	May 2	388		
July 28	1507	852				July 28	3583	2471	November 4	242	29	July 7	215	81	9	347	9	
August 4	1503	983				August 4	4517	3652	11	215	29	14	372	104	16	353	3	
August 11	1550	797	July 21	1186	917	August 11	4855	4115	18	200	18	21	365	120	23	385	14	
August 18	1532	651	August 4	1728	1396	August 18	5205	4463	25	226	7	28	423	151	30	399	17	
August 25	1508	449	August 11	2256	1922	August 25	4841	4218	September 1	221	20	August 4	491	206	June 6	405	43	
September 1	1490	507	August 18	2077	1745	September 1	3897	3344	8	198	19	11	538	283	13	558	112	
September 8	1210	563	August 25	3034	2713	September 8	3157	2550	15	212	5	18	638	321	20	611	168	
September 15	621	451	September 1	2853	2539	September 15	2148	1672	22	1994	1551	25	787	429	27	684	267	
September 22	629	349	September 8	3385	3035	September 22	1994	1551	29	236	852	Buried in the 97 Parishes within the Walls	1011	638	July 4	1006	470	
September 29	450	330	September 15	3078	2724	September 29	236	852	October 6	833	538	Whereof of the Plague	8	1069	650	11	1268	727
October 6	408	327	September 22	1531	12818	October 6	815	511	13	815	511	190	15	1306	865	18	1761	89
October 13	422	323	September 29	2245	2195	October 13	651	331	20	651	331	Buried in the 16 Parishes without the Walls	22	1229	775	25	2755	1843
October 20	330	308	October 6	1961	1732	October 20	375	134	27	375	134	Whereof of the Pl.	29	1403	928	August 1	5014	2010
October 27	320	302	October 13	1831	1641	October 27	357	89	November 3	357	89	Buried in the 9 Out-Parishes in Middlesex and Surrey, and at the Pest-house	October 6	1405	921	8	4030	2817
November 3	310	301	October 20	1312	1149	November 3	319	92	10	319	92	Whereof of the Pl.	13	1302	792	15	5319	3880
November 10	309	209	October 27	766	642	November 10	274	48	17	274	48	Buried in the 97 Parishes within the Walls	20	1002	555	22	5568	4237
November 17	301	107	November 3	625	508	November 17	231	27	24	231	27	Whereof of the Pl.	27	900	458	29	7496	6102
November 24	321	93	November 10	737	594	November 24	190	15	December 1	190	15	Buried in the 9 Out-Parishes in Middlesex and Surrey, and at the Pest-house	November 3	1300	838	September 5	8252	6988
December 1	349	94	November 17	545	442	December 1	181	15	8	181	15	Whereof of the Pl.	10	1104	715	12	7690	6544
December 8	331	86	November 24	384	251	December 8	168	6	15	168	6	Buried in the 97 Parishes within the Walls	17	950	573	19	8297	7165
December 15	329	71	December 1	223	102	December 15	157	1	22	157	1	Whereof of the Pl.	24	857	476	26	6460	5533
December 22	386	39	December 8	163	55	The Total of all is 51578 Whereof of the Plague 35403			The Total of all the Burials this time 10545 Whereof of the Pl. 1317			December 1	614	321	October 3	5720	4929	
The Total of all that have been buried is 25886 Whereof of the Plague 11503			15	200	96	The Total of all is 37294 whereof of the Plague 30561			The Total of the Burials this year is 23359 Whereof of the Pl. 10400			8	459	167	10	5068	4327	
			22	168	74							15	385	85	17	3219	2665	
												24	1806	1421	24	1806	1421	
												31	1388	1031	31	1388	1031	
												November 7	1787	1414	November 7	1787	1414	
												14	1359	1050	14	1359	1050	
												21	905	652	21	905	652	
												28	544	333	28	544	333	
												December 5	428	210	December 5	428	210	
												12	442	243	12	442	243	
												19	525	281	19	525	281	
															The Total of the Burials this year is 97306 Whereof of the Pl. 6859			



*Advertisements for the better  
understanding of the several  
Tables: videlicet,*

*Concerning the Table of Casualties con-  
sisting of thirty Columns.*

**T**H E first Column contains all the *Casualties* hapning within the 22 single years mentioned in this Bill.

The 14 next Columns contain two of the last *Septenaries* of years, which being the last are first set down.

The 8 next Columns represent the 8 first years, wherein the *Casualties* were taken notice of.

*Memorandum, That the 10 years between  
1636 and 1647 are omitted as containing  
nothing Extraordinary, and as not consi-  
sistent with the Incapacity of a Sheet.*

The 5 next Columns are the 8 years from 1629 to 1636 brought into 2 Quaternions, and the 12 of the 14 last years brought into three more; that Comparison might be made between each 4 years taken together, as well as each single year apart.

The next Column contains three years together, taken at 10 years distance from each other; that the distant years, as well as consequent, might be compared with the whole 20, each of the 5 Quaternions, and each of the 22 single years.

The last Column contains the total of all the 15 Quaternions, or 25 years.

The Number 229250 is the total of all the Burials in the said 20 years, as 34190 is of the Burials in the said three distant years. Where note, that the  $\frac{1}{3}$  of the latter total is 11396, and the  $\frac{1}{20}$  of the former is 11462; differing but 66 from each other in so great a sum, *videlicet* scarce  $\frac{1}{200}$  part.



## *The Table of Burials and Christnings, consisting of 7 Columns.*

**I**T is to be noted, that in all the several Columns of the *Burials* those dying of the *Plague* are left out, being reckoned all together in the sixth Column: whereas in the original Bills, the *Plague* and all other diseases are reckoned together, with mention how many of the respective totals are of the *Plague*.

Secondly, From the year 1642 forwards, the account of the *Christnings* is not to be trusted, the neglects of the same beginning about that year: for in 1642 there are set down 10370, and about the same number several years before, after which time the said *Christnings* decreased to between 5000 and 6000, by omission of the greater part.

Thirdly, The several Numbers are cast up into *Octonaries*, that Comparison may be made of them as well as of single years.

## *The Table of Males and Females, containing 5 Columns.*

First, The Numbers are cast up for 12 years ; *videlicet* from 1629, when the distinction between *Males* and *Females* first began, until 1640 *inclusive*, when the exactness in that Account ceased.

Secondly, From 1640 to 1660 the Numbers are cast up into another total, which seems as good for comparing the Number of *Males* with *Females*, the neglect being in both Sexes alike, and proportionable.

The Tables concerning the *Country-Parish*, the former of *Decads* beginning at 1569, and continuing until 1658, and the later being for single years, being for the same time, are so plain, that they require no further Explanation than the bare reading the Chapter relating to them, &c.

**F I N I S.**











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